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DOCTOR OF EDUCATIONAL PSYCHOLOGY

Transition to Secondary school for young people with autism spectrum disorder

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Elizabeth Fraser Selkirk Hannah

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**Transition to Secondary School for Young People
with Autism Spectrum Disorder**

Elizabeth Fraser Selkirk Hannah

**Submitted in part fulfillment of the requirements for the degree
Doctorate in Educational Psychology
University of Dundee
March 2008**

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Candidate's Declaration

The candidate declares that she is the author of this report. All references cited have been consulted by the candidate. The candidate also declares that the work of which this report is a record has been done by this candidate and that the report has not been previously accepted for a higher degree.

Signed _____

Date _____

Abstract

Transition to secondary school for young people with autism spectrum disorder

Elizabeth Fraser Selkirk Hannah

The transition to secondary school is important for all students. For students with autism spectrum disorder (ASD), who have difficulty with changes in routine (WHO, 1992), it is especially important that the transition is carefully managed. This report aims to contribute to the understanding of this process. The first study involved a systematic investigation and critique of literature on this transition with a specific focus on students with ASD. The second study comprised the development, implementation and evaluation of a transition programme for nine students with ASD. All were in their final year at mainstream primary schools in a Scottish city. The final study followed up the progress of eight of these students during their first year at secondary school. The empirical studies utilised a range of process and outcomes measures, including questionnaires, semi-structured interviews and discussion activities. There was a paucity of scholarly literature on the transition of students with ASD indicating the need for further research. The programme received positive student and parent evaluations and there was some evidence of impact using outcome measures. Feelings of anxiety mixed with excitement were associated with the transition. Students reported higher than normal anxiety levels before and after transfer, although there was evidence of a slight reduction over this period. Students and parents provided a positive evaluation of the students' social functioning in secondary school, in contrast to the mixed perspective of secondary school staff. Findings are discussed with reference to the literature. Limitations of the present research are considered. Finally, implications for practice and possible areas for future research are proposed.

Keywords: autism spectrum disorder; transition; secondary school; anxiety; social functioning

**Students making the transition between the primary
and secondary stages of education with a specific
focus on students with autism spectrum disorder: a
review of the literature**

Elizabeth Fraser Selkirk Hannah

**Submitted in part fulfillment of the requirements for the Doctorate in
Educational Psychology**

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Abstract 1

Students making the transition between the primary and secondary stages of education with a specific focus on students with autism spectrum disorder: a review of the literature

Elizabeth Fraser Selkirk Hannah

The move from the primary to the secondary stages of education brings with it many changes. For students with autism spectrum disorder (ASD), the transition is especially demanding. Underlying the behaviour of all children with ASD is the triad of impairments (Wing, 1992) which refers to difficulties with social interaction, social communication, and imagination. Students with ASD have problems coping with changes in routine (WHO, 1992) and this may result in increased levels of anxiety (Attwood, 1998). Therefore, it is especially important that all transitions should be carefully planned and implemented. The aim of this literature review is to carry out a systematic investigation and critique of literature on the transition of students from primary to secondary school with a specific focus on students with ASD. Details of the literature search methodology are provided. Three broad themes emerge from reading the literature. These are physical and organizational aspects; academic and curricular aspects; and personal and social aspects. This conceptual categorization is used to structure the general literature on transition. Four studies that focus exclusively on the transition of students with ASD are considered and critiqued in some depth. The discussion section provides an integration and critical evaluation of the transition literature. In considering the implications for educational policy and practice, the question as to whether there are unique approaches for students with ASD, making the transition to secondary school, is posed. On balance, it is concluded that recommendations should be based on the best available evidence, whilst acknowledging the need for further research. Possible areas for future research are suggested. Finally, the limitations of this research are considered.

Keywords: autism spectrum disorder; transition; primary school; secondary school

1 Introduction

1.1 Topic and purpose of review

The focus of this literature review is the transition of young people with autism spectrum disorder (ASD) moving between the primary and secondary stages of education. The overall aim is to carry out a systematic investigation and critique of literature on the transition of students from primary to secondary school with a specific focus on students with ASD.

The scope of the literature review was restricted to students in general and students with ASD making the transition between the primary and secondary stages of education (these concepts are defined in section 2.1). It was decided not to include students who have additional support needs arising from other factors. This decision was reached for the following reasons:

1. The writer's research interest, which will form the basis of further modules, is the transition of students with ASD moving from mainstream primary schools to mainstream secondary schools (or units within mainstream secondary schools) in the authority in which she is employed.
2. The concept of "additional support needs" as defined in section 1 of The Education (Additional Support for Learning) (Scotland) Act 2004 is very broad. The Act states that additional support needs may arise from a wide range of factors including the "learning environment, family circumstances, disability and health issues, and social and emotional

factors” (Scottish Executive, 2005a, p. 50). The writer was of the view that an in-depth consideration of the plethora of factors which could result in a student being deemed to have additional support needs would detract from the main focus of the research, namely the additional support needs of students with ASD.

3. The concept of “additional support” is defined in section 1 of The Education (Additional Support for Learning) (Scotland) Act 2004 as “provision which is additional to, or otherwise different from, the educational provision made generally for children” (Scottish Executive, 2005a, p. 15). The perspective encapsulated in this definition resonated with the writer’s research stance and provides some justification for the focus on the ‘additional support’ requirements of students with ASD as compared to that provided for students in general making the transition to secondary school.

Research questions which the review attempts to address:

1. What are the experiences of students making the transition from the primary to secondary stages of education?
2. What approaches have been advocated to facilitate the transition of students from the primary to secondary stages of education?
3. How effective have these approaches been?
4. What are the experiences of students with ASD making the transition from the primary to secondary stages and how does that compare with those of students in general?

5. What approaches have been advocated to facilitate the transition of students with ASD from the primary to secondary stages and how does that compare with those used with students in general?
6. How effective have these approaches been and how does that compare with those used with students in general?
7. What are the implications for educational policy and practice in relation to the transition of students with ASD from the primary to secondary stages?
8. What are possible areas for future research?

1.2 Relevance of topic

For all children and young people, the move from the primary to the secondary stages of formal education brings with it many changes. There is the sense of moving from the familiar and secure world of the small primary school with one class teacher and a relatively stable group of peers to a large secondary school, with a range of teachers and a relatively new peer group. However, for pupils with ASD, the transition between the primary and secondary stages of schooling must be especially demanding. Underlying the behaviour of all children with ASD, regardless of level of intelligence or any additional difficulties is the triad of impairments (Wing, 1992; Wing & Gould, as cited in Brogan, 2000). The triad of impairments associated with ASD refers to difficulties in social interaction, social communication, and imagination. These difficulties will impact on all aspects of a young person's functioning in a school environment. Associated with the impairment in

imagination, students with ASD have problems coping with changes in routine (WHO, 1992) and this may result in increased levels of anxiety (Attwood, 1998). Therefore, it is especially important that all transitions should be carefully planned and implemented.

The Education (Additional Support for Learning) (Scotland) Act 2004 provides a legislative structure and framework to support the education of children and young people who may require additional help at various points in their education. It introduces the new term of “additional support needs” which is defined in the Act in the following terms:

A child or young person has additional support needs for the purposes of this Act where, for whatever reason, the child or young person is, or is likely to be, unable without the provision of additional support to benefit from school education provided or to be provided for the child or young person. (Scottish Executive, 2005a, p. 15)

The Education (Additional Support for Learning) (Scotland) Act 2004 confers a range of functions and imposes a number of duties on education authorities in relation to children and young people with additional support needs. These include powers and duties in relation to transition arrangements. A range of transitions are described including entry to pre-school provision; transfers to primary school, secondary school and post-school provision; moving schools; exclusions from school; and school closures. The 2004 Act stipulates that education authorities should have appropriate arrangements in place for children and young people with additional support needs to ensure that these transitions are effective. It

articulated the importance of early planning, and liaison with all stakeholders, including other agencies, parents, children and young people.

The 2004 Act is supported by the Changes in School Education Regulations (Scottish Executive, 2005b) that specify the actions an education authority should undertake at various transition points for a child or young person who transfers to or from education provision under its management. The 2004 Act and the Regulations require education authorities to carry out their duties to plan for transfers and transitions within set timescales. For school-age children the timescale for the seeking and taking advice from other agencies, parents, children and young people is twelve months and for pre-school children six months. This would be followed by a transition planning meeting and then by provision for the sharing of information with appropriate agencies.

1.3 Preview of points covered in main body of report

The next section of the review will outline the methodology employed, taking account of key concepts, parameters of the search strategy and the research questions used to guide the data analysis. The results section considers the general literature pertaining to the transition of students between primary and secondary school; and an in depth look at four papers which looked at the transition of students with ASD moving between the primary and secondary stages of education. Discussion of the literature is structured around the research questions as detailed in the introduction section. Also, implications for educational policy and practice and possible areas for future research are

outlined. Finally, some of the limitations of the review process are considered.

2 Methodology

2.1 Key concepts

2.1.1 Autism Spectrum Disorder

In conducting the literature search for this review, it was necessary to have a clear understanding of the range of terminology used to describe children and young people with autism spectrum disorder. Furthermore, it was helpful to have an appreciation of the changing nature of our understanding of ASD including diagnostic criteria and prevalence levels.

It is evident from analysis of the literature in this field that there is an interrelationship between changing definitions of autism (and related terms) over the past sixty years or so and prevalence levels. Notably, as there has been a broadening of conceptualization, there has also been a concomitant increase in reported prevalence levels. That is not to exclude the impact of other factors on prevalence levels; e.g. better understanding on the part of professionals. Furthermore, it has been stated that variations in prevalence rates between different parts of the world and different areas within the same country can be attributed to differences in definitions (NAS, 1997) and/or interpretations of diagnostic criteria (Wing, 1993). It should be noted that this would not preclude actual differences.

Firstly, let's consider changing definitions and diagnostic criteria for autism over the past sixty years or so. The first published account of autism can be

traced to the middle of the twentieth century (Kanner, as cited in Wing, 1992). Kanner used the term 'early infantile autism' to describe patterns of behaviour observed in individuals who had been referred to his clinic and, in later years, to a particular special school. One year later, in 1944, Hans Asperger, working in Vienna, published a paper in which he described children with what he termed 'autistic psychopathy'. These children formed a broader group which included those who shared the characteristics of Kanner's autism, those with neurological impairments and those of average cognitive ability (Asperger, as cited in Frith, 1991; NAS, 1997). Nowadays, the use of the term Asperger syndrome is reserved for the latter group. Frith (1991) argues that difficulties accessing Asperger's original paper, written in German, had resulted in a neglect of the syndrome which he described. To address this issue, one chapter of Frith's book is dedicated to a translation of Asperger's original paper. Frith (1991) refers to the debate surrounding definitions and diagnostic categories and, in particular, whether Asperger syndrome should be considered as a discrete diagnostic category or a subcategory of autism. In her account, Frith opts for the subcategory option. This view is in line with mainstream opinion that Asperger syndrome is "not quantitatively or qualitatively different from autism and forms part of the spectrum of autistic disorders" (PHIS, 2001, p. 9). In a study of children with special needs in the former London Borough of Camberwell, Lorna Wing and Judith Gould considered individuals with an IQ of less than 70 with the behaviour pattern as outlined by Kanner. In the same study, Wing and Gould (as cited in NAS, 1997) also referred to a group of children who had impairments in social interaction, social communication and imagination but

did not fit in with Kanner's original description of 'early infantile autism'. They coined the term 'triad of impairments' to describe this group of children, noting that it was accompanied by "a limited, narrow, repetitive pattern of activities" (Wing, 1992, p.5). This conceptualization of the 'triad of impairments' has been influential to our more recent understanding of ASD. It has resulted in a broadening of the definition from classical autism to what has been termed "autistic spectrum". The two major diagnostic systems in current usage are based on the triad of impairments (PHIS, 2001). These are the International Classification of Diseases 10 (ICD-10) (World Health Organisation, as cited in PHIS, 2001) and the Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM-IV) (American Psychiatric Association, as cited in PHIS, 2001).

Secondly, let's look at prevalence levels for autism, over the same period. In his study in the 1940s, Kanner did not provide estimates of prevalence of autism in the general population but he thought it was rare (Wing, 1993). Twenty years after Kanner's original paper, Victor Lotter published the results of an epidemiological study of children, representing the whole ability range, who displayed the behaviour patterns as described by Kanner in 1943. Lotter obtained a prevalence rate of 4.5 per 10,000 (Lotter, as cited in NAS, 1997). In their Camberwell study, Lorna Wing and Judith Gould found a prevalence rate of nearly 5 per 10,000 for those individuals with an IQ of less than 70 with the behaviour pattern as outlined by Kanner. This is a similar figure to that found by Lotter (as cited in NAS, 1997). They found a prevalence rate of 15 per 10,000 for the wider group of children who had the

triad of impairments but did not fit in with Kanner's original description of 'early infantile autism'. In 1993, Ehlers and Gillberg conducted research in Gothenberg into the prevalence levels of ASD in children with IQs above 70 in mainstream schools. Previous studies had focused on children with learning difficulties. They found a rate of 36 per 10,000 for Asperger syndrome and 35 per 10,000 for those described as having "social impairments". The latter group, although not meeting the criteria for Asperger syndrome, had disorders within the autistic spectrum. Thus, it can be seen that prevalence levels have increased as the definition of autism spectrum disorder has broadened from the 'early infantile autism' as described by Kanner (as cited in Wing, 1992) to the current concept of an autism spectrum.

In summary, autism spectrum disorder is recognized as a developmental disorder. As such, its presentation depends on a range of factors including age, cognitive abilities, individual personality, and the presence of other disorders (PHIS, 2001; Wing, 1992). It is also a lifelong condition and changes in presentation will occur over time in any one individual, especially those with higher cognitive abilities (PHIS, 2001).

The term 'autism spectrum disorder' will be used in this literature review to cover syndromes ranging from the classical form of autism as described by Kanner in 1943 (as cited in Wing, 1992) to that described by Hans Asperger in 1944 (as cited in Wing, 1992).

2.1.2 Transition

The focus of this literature review is the transition between the primary and secondary stages of education (or its equivalent in other countries). Firstly, the author will consider general definitions and conceptualizations of transition.

Some writers have taken a broad conceptual view of transition. For example, Newman and Blackburn (2002) describe transition as “any episode where children are having to cope with potentially challenging episodes of change, including progressing from one developmental stage to another, changing schools, entering or leaving the care system, loss, bereavement, parental incapacity or entry to adulthood” (p.1)

Although this refers to the transition associated with moving between schools, it includes a number of other types of transition. Anderson, Jacobs, Schramm and Splittgerber (2000) distinguish between ‘systemic’ transitions for students, which are the result of the structure of the education system of a particular country, and what they describe as ‘developmental’ transitions. These are “marked by considerable individual physical, intellectual, and emotional change” (p. 325). A specific example they suggest is puberty.

Some researchers looking at systemic transitions in the education system have distinguished between transitions and transfer. Galton, Morrison and Pell (2000) argue that transfer between schools should be seen as a “particular case of year-to-year transitions” (p. 352). Similarly, Demetriou,

Goalen and Ruddock (2000) define transfer as the “move from one school to another” (p. 436) and transition as “the routine breaks in learning that occur as students move from one year to another” (p. 436).

In this review, the generic term ‘transition’ will be used to cover moves between schools and different years of schooling. Occasionally, the term ‘transfer’ will be used to describe moves between schools, perhaps when that was the term used by the original researchers. Developmental conceptualizations of transition will have utility in later sections when there will be consideration of theoretical perspectives of the transition process.

2.1.3 Transition between the primary and secondary stages of education

Internationally, different terms are used to denote the different phases of compulsory education. Furthermore, there is wide variation in the structure of education systems. Children start compulsory education at different ages and there are differences in the number of school changes children experience moving between the different phases. In a comparative study of lower secondary education in the sixteen countries in the International Review of Curriculum and Assessment Frameworks Archive (INCA), Greenaway (1999) reported that compulsory education commences between the ages of five and seven. Transition to the second stage of compulsory education, which Greenaway (1999) termed “lower secondary” occurs between the ages of ten and fourteen. Le Métais (2003) also looked at the transition between primary and secondary education utilising INCA, which by

then had been expanded from sixteen to eighteen countries. In addition, Le Métais (2003) sourced information on the education system in Finland using the Eurydice website. She reported that the most common age of transfer to secondary education was eleven and twelve. It should be noted that some countries operate education systems which avoid a transition between the primary and lower secondary stages. Sweden and Finland have single phase education systems (Greenaway, 1999; Le Métais, 2003). In some states in the USA, children attend the first stage of compulsory education up to the age of fourteen before transferring to high school, thus eliminating a lower secondary stage.

Even within the United Kingdom (UK), there are differences in the structure of the education system, including age of starting school, number of tiers and age at transition between the stages. In Scotland, children start school aged between four and a half and five and a half years. Primary school education covers the first seven years of compulsory education. Children commence secondary school aged between eleven and a half and twelve and a half years and may leave school at the statutory school leaving age of sixteen years. Young people may also stay on at school and are able to leave between the ages of sixteen and eighteen years. In England and Wales, children have six years of primary education before transferring to secondary school. Some local authorities in England have a three tier system of primary, middle and upper schools. Transfer to middle school could occur at ages eight to ten years and to upper school at twelve to fourteen years (Greenaway, 1999).

For the purposes of this review, a developmental perspective will be adopted in that the author will include literature referring to transfers between different phases of a country's education system which occur between the ages of ten to fourteen inclusive. The term primary to secondary will be used to refer to school changes occurring during this age range.

2.2 Search strategy

The literature search was carried out in two main phases. The first phase covered the period December 2004 to January 2005. The aim during this initial phase was to identify literature pertaining to the transition of children and young people with autism spectrum disorder transferring between the primary and secondary stages of education (as defined in section 2.1.3). The following databases were searched:

- Web of Knowledge (Web of Science and ISI proceedings)
- Educational Resources Information Centre (ERIC)
- British Education Index (BEI)
- Bath Information and Data Services (BIDS) International Bibliography of Social Sciences (IBSS)
- Bath Information and Data Services (BIDS) Ingenta Services

The following key words and wild card prefixes were used in various combinations:

- Adolescence

- ASD
- Aspergers
- Aut* and aut?
- Autis*
- Autism
- Educ*
- Education*
- Middle childhood
- School*
- Transition, transition* and transition?

The search was restricted to English language publications covering the period 1990 to September 2004.

A number of journals of high relevance were searched electronically. In alphabetical order these were:

- Autism
- British Journal of Special Education
- Child and Adolescent Mental Health
- Child: Care, Health and Development
- Child Care in Practice
- Child Development
- Educational Psychology in Practice
- Journal of Child Psychology and Psychiatry and Allied Disciplines
- Journal of Computer Assisted Learning

- Journal of Intellectual Disability Research
- Support for Learning

A manual search was conducted in the following journal:

- Good Autism Practice

The search was restricted to the period 1994 to December 2004.

A number of useful websites were accessed including:

- <http://www.google.co.uk/>
- <http://scholar.google.com/>

The second phase of the literature search was conducted over the period February 2006 to March 2006. The focus of the search was broadened to the transition between the primary and secondary stages of education for all children and not restricted to those with autism spectrum disorder. Between the first and second phases of the literature search, the author accessed a number of relevant papers, reports and theses through personal communication.

The following databases were searched:

- Web of Knowledge (Web of Science and ISI proceedings)
- Educational Resources Information Centre (ERIC)
- British Education Index (BEI)
- Bath Information and Data Services (BIDS) Ingenta Services

The following keys words and wild card prefixes were used in various combinations:

- Adolescence
- Age
- Aut?
- Autis*
- Autism
- Educ*
- Junior high
- High school
- Primary
- Resilience
- Secondary
- School
- Trans*
- Transfer
- Transition, transition*, transition? & transitions

The search was restricted to English language publications covering the period 1996 to December 2005.

A number of journals of high relevance were searched electronically. In alphabetical order these were:

- Autism

- Brain
- Child Care in Practice
- Children and Society
- Disability in Society
- Focus on autism and other developmental disabilities
- International Journal of disability, development and education
- International Journal of Educational Research
- International Journal of Epidemiology
- Journal of Autism and Developmental Disorders
- Journal of Child Psychology and Psychiatry and Allied Disciplines

The search was restricted to the period 1994 to early 2006.

A number of useful websites were accessed including:

- <http://www.dfes.gov.uk/>
- <http://eppi.ioe.ac.uk/EPPIWeb/home.aspx>
- <http://eric.ed.gov/>
- <http://scholar.google.com/>
- <http://www.ltscotland.org.uk/>
- <http://www.ltscotland.org.uk/ngflscotland/>
- <http://www.scotland.gov.uk/>

Approximately fifty papers were sourced which included reference to primary to secondary transition. Of these a few focused exclusively on the transition of children with ASD.

2.3 Method of analysis of articles/papers

As detailed in the introduction section, the research questions are:

1. What are the experiences of students making the transition from the primary to secondary stages of education?
2. What approaches have been advocated to facilitate the transition of students from the primary to secondary stages of education?
3. How effective have these approaches been?
4. What are the experiences of students with ASD making the transition from the primary to secondary stages and how does that compare with those of students in general?
5. What approaches have been advocated to facilitate the transition of students with ASD from the primary to secondary stages and how does that compare with those used with students in general?
6. How effective have these approaches been and how does that compare with those used with students in general?
7. What are the implications for policy and practice in relation to the transition of students with ASD from the primary to secondary stages?
8. What are possible areas for future research?

3 Results

For the purposes of this review, literature has been grouped on the following basis:

- Transition of students
- Transition of students with ASD

It should be noted that the author came across a couple of papers on children with disabilities (Kapasi & Hancock, 2006; Carter, Clark, Cushing, & Kennedy, 2005). These will be embedded in later sections of the report.

3.1 Transition of students

Whilst reading the literature in this area, three broad themes emerged:

- Physical and organizational aspects
- Academic and curricular aspects
- Personal and social aspects

It has been decided to use this conceptual categorization to structure the results section.

3.1.1 Physical and organizational aspects

This sub-section will consider changes to physical and organizational aspects of the school environment (e.g. physical size, layout, numbers of students and teachers and timetabling) which students have to negotiate as they make the transition from primary to secondary school.

3.1.1.1 What physical and organizational differences do students perceive?

Akos (2004) conducted an extensive qualitative investigation of eighth grade students' perceptions of the transition to middle school in Virginia State, USA. He uses the medium of writing for this purpose and provides a detailed account of the data analysis methodology. This includes articulation of possible sources of bias. The first step of the analysis involved the identification of 'meaning units' in the three hundred and fifty compositions. Through a process of coding and tabulation, themes emerged from the data which were further grouped into larger themes. The final step involved grouping the coded themes into three core areas (organizational, academic and personal/social) which had been identified from previous transition research. In relation to the organizational themes, Akos (2004) found that these accounted for 41% of all the meaning units. The most common theme in this category pertained to choosing and changing classes. Knowing rules, following rules and knowing the consequences of your actions were other common themes.

Interestingly, previous research is cited (Akos & Galassi, as cited in Akos, 2004) which suggests that there is a temporal element to the importance of organizational aspects. Knowing your way round the school and related aspects are of interest to the student just before transition or in the first few months after transition. Johnstone (2001) carried out an investigation into the perceptions of ten students moving from rural primary schools in Australia. She used a qualitative research methodology based on an

ethnographic case study approach. A range of data collection methods were employed. These included face-to-face interviews, open-ended questionnaires, and journal keeping. The students were followed from their final weeks at primary school and throughout the first three terms of secondary school. Data analysis utilized a grounded theory approach to generate three main categories. One of the categories was described as 'adaptation to organizational change'. Prior to the transfer, students were concerned about school size and layout, and the large number of teachers. Following the transfer, these were replaced by worries about teacher differences with regard to style and management and students' organizational skills.

In New Zealand, Ward (2000) conducted an investigation into the transfer of eighteen students from a middle school to four different secondary schools. He set the study in the context of changes to the structural organization of the education system. Traditionally, New Zealand had attempted to address concerns about transfer and discontinuity through the provision of transition to middle schools covering years seven and eight. Changes over the previous decade had enabled primary and middle schools to extend the age range and stage for which they catered. Ward was interested in the views and experiences of students who had stayed for four years at the middle school before transferring to secondary school. Prior to transfer, students had concerns about organizational aspects such as getting lost and finding their way between classes. Indeed, following transfer, students reported that

the first few days of secondary school had been very confusing. However, these feelings were very short-lived and were replaced by social concerns.

Tobbell (2003) conducted a qualitative investigation into students' experiences of the move from primary to secondary school. She found that organizational problems impacted on the students' learning experience. The study took place in a high school in the North-West area of England where children transfer after year six. The research focused on the views of thirty girls in year seven. There is a clear articulation of the research stance and methodology. Tobbell recognizes the potential for researcher bias and provides the reader with information on her knowledge and experience. A grounded theory stance is adopted with regard to the emergence of theories from the data. Students' views were sought using a combination of semi-structured interviews and focus groups. The interviews covered such topics as primary school experience; secondary school experience; and preparation for transition (whether it occurred, whether it helped and how it helped). The focus group structure was chosen to encourage the students to challenge each other and provide insight into their views. Thematic analysis of the data was used. One of the emerging themes pertained to perceptions of the learning experience. Aspects of the secondary school timetable were viewed negatively e.g. having maths after history and having lessons which were too short. The primary school timetable was viewed in a positive way as being more flexible and responsive. On the positive side, the breadth of the subjects on offer was welcomed. The number and range of teachers was raised as an issue with some participants saying it led to confusion and others referring to difficulties forming relationships with teaching staff.

3.1.1.2 What approaches have been used and what strategies have been advocated to facilitate this aspect of the transition process?

Mizelle (1999) has highlighted the importance of transition programmes to facilitate the transfer of students from middle schools to high schools. He suggests a range of ways in which prospective high school students can be provided with relevant and useful information about their new school. These include visits to the high school in the spring; shadowing a high school student; attending a presentation by a high school student or panel of students; discussions with eighth grade teachers and counselors; and a web page constructed by high school students providing information for prospective students from an insider perspective. Mizelle (1999) proposes a range of ways in which the parents of prospective high school students can be provided with relevant information in order that they can support their children through this process. These include participation in a conference involving their child and the high school counsellor; visits to the high school with their child; spending a day at the high school; and arranging contact with parents of current high school students.

In her Australian study, Johnstone (2001) proposes a number of recommendations relating to organizational aspects. These include better coordination of preparatory strategies between high schools and their feeder rural primary schools; having year 7 students being taught in the same room by different specialist teachers; and greater collaboration between year 7 teachers regarding teaching styles, expectations and management approaches. Ward (2000) notes that the provision of timetables and maps in

two of the secondary schools in his study provided security for the students. Akos (2004) makes a number of recommendations including the provision of orientation programmes (e.g. tours) to enable students to gain some insight into the layout of the building, moving between classes, and knowledge of available resources (e.g. lockers). What is not clear from reading the literature is rigorous evidence for the effectiveness of these recommended approaches.

3.1.2 Academic and curricular aspects

This sub-section will consider academic and curricular features of the transition process.

3.1.2.1 What academic and curricular differences do students experience and how are these differences evaluated?

A number of researchers, exploring students' perceptions of the transition process, have considered academic and curricular aspects. These studies have typically looked at perceptions across the transition divide.

In a survey of children in their final year of primary school in nine schools in a Scottish city, Graham and Hill (2003) found that 82% of the students were looking forward to 'learning new things' and 79% were positive about 'doing practical subjects'. The one aspect of learning which the pupils were most concerned about was having more homework (53%). The views of the participants were followed up after one term in secondary school using

questionnaire methodology. Overall, the majority of the students had coped well with the transition although there were some indications that students from black and ethnic minority backgrounds, especially those of Asian ethnicity, were less positive about secondary school. Concerns about the learning aspects of school had reduced by the time the students had been in secondary school for a few months. For example, there was a reduction from 53% to 21% in worries about homework. Following on an earlier study, Caulfield, Hill and Shelton (2005) focus on the experiences of students from black and minority ethnic backgrounds who had made the transition to secondary school. The researchers interviewed fifty-six young people, aged eleven to thirteen years, in the first and second year of secondary school. Views of their expectations of the move to secondary were retrospective and as such could have impacted on the reliability of their recollections. The students had positive views of learning at secondary in that they commented on the greater variety of learning experiences. They also expressed a view that by encouraging greater responsibility, and being included in decisions about their education, they felt more engaged in the academic aspects of secondary education.

Also in the Scottish context, Besley (2004) conducted a longitudinal study of a cohort of students moving from primary to secondary school in one local authority. The purpose of the audit was illuminative utilising information about pupils' experiences of the process to help inform policy and planning in the authority which had commissioned the study. A range of methodologies were employed including questionnaires and a semi-structured focus group. The

cohort was followed through from primary seven to secondary one. The emphasis was on the teaching and learning experiences of the students. Overall, the transition to secondary school was viewed positively by students. They reported satisfaction with the teaching and learning aspects of their new school. This included doing more subjects; finding secondary school work more interesting; and being comfortable with the class work.

In another area of the UK, Pounton (2000) conducted a small-scale study of students' perceptions of classroom environments in primary and secondary schools and their views regarding their preferred learning environments. This investigation involved interviews with students aged eleven to twelve years in five comprehensive schools in a small town in East Anglia. Thirteen students were interviewed in the summer term at the end of their first year at secondary school. There is no detail regarding sampling methodology although the author indicated that the students had been part of a larger cohort study that she had undertaken with a co-researcher. Four aspects were identified as differences between the learning environments of primary and secondary schools. Firstly, movement about the school was a feature of secondary schools. The majority of the students reported that they liked this aspect. Reasons for rating this aspect positively included a strengthening of the distinctiveness of different subjects; and getting to know different people in the different rooms. A negative feature was the sense of loss of ownership of space. In primary schools, the students would have been in one class with one teacher, therefore would have had a sense of their classroom. Secondly, physical aspects of the learning environment such as size, light,

temperature, space and orderliness were commented upon. The students had clear ideas about those aspects which contributed to a good quality learning environment. Thirdly, reference was made to the use of displays in the classrooms. The theme of ownership emerged in relation to the sense that it was up to the teacher to decide what work or material was displayed. Finally, with regard to seating, there was recognition of the advantages of flexibility in seating arrangements linked to different learning tasks.

In another UK study, participants commented on differences in classroom management approaches between primary and secondary school which impacted on their perceived learning experience (Tobbell, 2003). In particular, students noted that the focus in secondary schools was individualized styles of learning rather than the group style of learning favoured in primary schools. Tobbell (2003) concludes that this reflects the students' desire for a more collaborative style of learning built around relationships with peers.

In a North American study of eighth graders' perceptions of the transition to middle school, Akos (2004) found that academic themes accounted for 34% of all meaning units. Personal application to school work was evident in the frequently reported themes of studying (17%) and homework (16%). These were related to keeping up grades. Maintaining good relationships with teachers was included in this academic category. Student responsibility or role in this relationship with teachers is not articulated by the author. Difficulty of work was reported by 7% of the students.

3.1.2.2 What is the impact of transfer to secondary school on students' educational progress?

In 1969, Nisbet and Entwistle conducted a large scale longitudinal study involving three thousand two hundred nine-year old pupils from thirty-three schools in Scotland. They found a positive association between adjustment to secondary school and academic progress (Nisbet & Entwistle, as cited in Galton, Gray, & Ruddock, 1999). This would suggest that students making a successful transition to secondary school are more likely to make good academic progress.

In the late 1970s, over a five year period, Maurice Galton, in association with colleagues at Leicester University, carried out an investigation into the effects of transfer on academic progress. This study is known as the ORACLE (Observation Research and Classroom Learning Evaluation). The researchers followed a cohort of pupils in two types of feeder schools, one catering for 5-9 year olds and one for 5-11 year olds. The follow-up continued until a year after the pupils' transfer to their new school (middle school or secondary school). Of interest to this review is the older cohort transferring at age eleven. Systematic classroom observations were conducted at various points in the session. Measurements of students' attitudes, anxiety levels and motivation were taken on three occasions. Attainment levels were assessed in the June before transfer and then again twelve months later (Galton & Willcocks; Delamont & Galton, both cited in Galton et al., 1999). In relation to academic progress, the researchers found a hiatus in progress using standardized tests of reading, language and mathematics.

Furthermore, a significant number of students (40%) made either losses or no gains in absolute terms. This was especially the case for performance in language tests.

Suffolk LEA has been collecting data on pupil performance as part of the Suffolk School Improvement Project. The findings from this project are in line with those of ORACLE, namely that pupils' attainments either 'dip' or 'stand still' following transfer to a new school. This finding was most noticeable in tests of reading. It was found that students who were in schools catering for five to eleven year olds made more progress on average than those who transferred to middle schools. Similarly, those transferring to middle schools made more progress than those transferring to secondary schools in Key Stage 3 tests of reading (Suffock, LEA, as cited in Galton et al., 1999) which take place at the point of entry to secondary school.

In a replication of the original ORACLE study, using a smaller sample from the original schools, and updated versions of measurement instruments, Galton and colleagues found that students performed less well on tests, based on number of correct items, following transfer. This finding was more pronounced in students moving after year four than after year six. For year seven students, the proportion performing less well were 34% in mathematics, 38% in reading and 42% in English language. Furthermore, 12% of the pupils at year five and 7% at year seven made even more significant loses in the region of between a quarter and a third (Galton, Hargreaves, Comber, & Wall, as cited in Galton et al., 1999).

In a 'literature and effective practice review' commissioned by the Department for Education and Employment (DfEE), Galton et al. (1999) investigated whether there was evidence that current practice around transfer and transition was having a negative impact on pupils' progress. There were two elements to this investigation. Firstly, the researchers conducted a review of the research literature and current research on transfer and transition. Secondly, they used a range of professional sources to gather information on current practice. These included schools, local education authorities and national agencies such as OFSTED. Evidence from OFSTED inspections suggests that there is a drop in pupil attainment at the time of transition from primary to secondary school. It should be noted that this is not actual attainment but inspectors' judgments of attainment levels. There is a steep rise in the proportion of schools where levels of student attainment are deemed to be 'unsatisfactory' between the end of Key Stage 2 and the early stages of year seven. The authors acknowledge that this may be a function of having different groups of inspectors in the primary and secondary sectors each having different perceptions.

Differences between the learning and teaching practices in different phases of the education system have been considered in relation to continuity across the transfer divide. In the original Oracle study conducted over the period 1975-1980, methods of teaching and learning were assessed through classroom observations (Galton & Willcocks; Delamont & Galton, 1986, both cited in Galton et al., 1999). Eight target pupils were selected, sampled from the top, middle and bottom academic levels. A gender balance was obtained.

These students were observed for three days at the beginning of each school year and at regular intervals during the transfer year, enabling a close focus on the processes during this period. The researchers found that there was a lack of continuity both with regard to the curriculum content and the teaching methods. This was evidenced in such practices as repeating work in the first year of secondary school; subject teachers belittling work undertaken in the primary school; mundane and boring teaching methods characterized by copying notes, drawing and colouring in. The researchers were of the view that this led to a loss of interest and concentration on the part of students.

Another aspect of the original Oracle study which highlighted differences between the primary and secondary school was the method of teacher interaction with students. Primary school teaching methods were characterised by the teacher starting off the lesson then setting the children to individual tasks either on their own or in a group context. The teachers then moved around the class interacting with individual students. However, students knew that they could request teacher support if required. A corollary of this was that students could opt out of learning through what the researchers termed 'intermittent working'. In the secondary school, pupils mainly sat in rows which meant that they could be closely observed by the teachers. In this context, students developed another method of disengagement which the researcher termed 'easy riding'. This involved students giving the appearance of working (e.g. underlining answers) and thus avoiding being given more work to do.

The relationship between motivation and achievement has been considered by a number of researchers. In a review of American research of transfer during the middle school years, Demetriou et al. (2000) concluded that there is evidence of a reduction in motivation levels after an initial period of adjustment post transfer and that this is due to a loss of self-esteem. This loss in self-esteem is construed as a response to the changing learning context. The educational environment during the middle school years is viewed as more competitive. Furthermore, it was felt that there is a mismatch between the 'typical' adolescent's desire to be treated in a more adult fashion and his/her actual experience. A reduction in motivation levels following transfer to secondary school was also found in a UK study. In the ORACLE replication study cited earlier (Galton, Hargreaves, Comber, & Wall, as cited in Galton et al., 1999), measurements of enjoyment and motivation were taken at three time points; namely the summer term prior to transfer, the November of the first term following transfer and the following summer term. Researchers used the scores obtained at the first time point to predict expected scores at the next two administration points. For the older group transferring at year six, there was a slight increase in enjoyment and motivation in November but by the June of the following year, there was decline in both enjoyment and motivation. One finding was of particular interest:

...while the correlations between attainment and social adjustment and motivation are in the expected direction there was a small but significant negative correlation between school enjoyment and attainment one year after transfer suggesting a group of pupils who are making satisfactory academic progress but becoming 'turned off' school; this being a slightly stronger trend for boys. (Hargreaves & Galton, 1999, as cited in Galton et al., 1999, p. 18)

The inter-relationship between motivation and school grades was studied by Zanobini and Carmen Usai (2002) in Italy. They also considered the role of self-concept. They measured these factors as students made the transition from primary to lower middle school at the end of the fifth grade. The participants completed two self-report inventories. Italian versions of the Multidimensional Self-concept Scale and Academic Motivation Scales were used to assess various types of self-concept and motivation (extrinsic, intrinsic and 'amotivation'). Final school grades were obtained at the end of the fifth grade and the end of the first year of middle school. In order to investigate causal components in relation to final school grades, the researchers conducted a 'path analysis'. An appropriate level of detail of this analysis is provided in the report. Results were used to develop a 'dynamic model' which visually illustrates the interrelationships between the different elements of self-concept, motivation and school grades. Final school grades at the end of fifth grade are predicted by academic self-concept and amotivation. These grades significantly affect 'amotivation' levels, academic self-concept and final grades at the end of first year of middle school. The role of competence self-concept is interesting. It becomes a more influential element following transition at sixth grade through positively influencing levels of intrinsic motivation and negatively influencing levels of amotivation. Academic self-concept has less of an influence on school grades following transition. In making sense of these findings, Zanobini and Carmen Usai (2002) suggest that the students' feelings of competence in dealing with a new situation (middle school) result in higher levels of achievement motivation.

In conclusion, despite the introduction of the National Curriculum, there remained ongoing concerns about pupils' progress as they moved between Key Stage 2 and Key Stage 3 (i.e. at point of entry to the secondary school) (Mann, 1997).

3.1.2.3 What strategies have been used to address academic and curricular aspects of the transfer process and how have these been evaluated?

One of the explanations of the reported “dip” or “hiatus” in academic progress following transfer to secondary school is that of curriculum discontinuity. This is thought to have the greatest impact when students change schools (HMI, as cited in Mann, 1997).

The four key stages of the National Curriculum was introduced in England and Wales in 1988 (U.K. Parliament, 1988) in an attempt to address the issue of curriculum discontinuity by providing greater coherence across the education system in those two countries. However, Galton et al. (2000) argue that the domination by representatives from the secondary sector in the national curriculum debate resulted in a translation of the secondary curriculum downwards to Key Stage 2. Furthermore, a survey by Suffolk LEA inspectors found that there were significant discrepancies in the work pupils were given after transfer to their new school. This included examples of students being given work at a much earlier level. (Galton et al., 2000). Updating a review of LEA practice conducted prior to the introduction of the National Curriculum, Gorwood (as cited in Galton et al., 2000) pointed out that, despite its introduction, there was still evidence that secondary staff

were starting students at the same level, thus appearing to ignore information on individual achievement prior to transfer. One explanation for these observed practices was, he suggested, the fundamentally different philosophies underpinning the training of primary and secondary school teachers.

On a more positive note, in 1996/97, the Education Management Information Exchange (EMIE) carried out a survey of policy and practice in local education authorities (LEAs) in England, Wales and Northern Ireland (Mann, 1997). Over half of the LEAs returned the questionnaire. In relation to the promotion of continuity and progression, the survey found that most LEAs were utilising a range of activities. These included cross-phase curriculum projects; agreed curriculum policies and practices; cross-curricular themes bridging years six and seven; utilising teaching and learning approaches in the secondary school which build on those used in the primary school; and the development and use of common Record of Achievements for ages five to sixteen. However, a criticism which could be levied at this survey is that it was descriptive rather than evaluative in purpose.

A number of writers and researchers have advocated the importance of communication between educators to facilitate the transition process. For example, Mizelle (1999) emphasizes the importance of communication between educators in middle schools and high schools. Some studies have found evidence of poor practice in this regard. Stillman and Maychell (as cited in Morgan, 1999), carried out in-depth studies of transfer to sixteen

middle schools in the Isle of Wight. They report poor levels of liaison which took the form of what they described as 'dysfunctional' meetings between the head teachers of the feeder schools and receiving schools. A similar picture was found in a large-scale study conducted by the City of Birmingham Education Department (BEDC, as cited in Galton et al., 2000) which focused on organizational features of the transfer process where students were transferring from primary to secondary school at the age of eleven years. The researchers found little evidence of liaison between the two sectors, the most common form of liaison comprising of visits by secondary teachers to the primary schools.

The transfer of information about students is another facet of the transition process which has been considered. Difficulties in this area have been highlighted. In the UK context, a consultative document drawn up by the Department for Education and Science (DfES, as cited in Galton et al., 2000) indicated problems pertaining to the transfer of information about primary pupils and the use that was made of that information by secondary school staff. A number of attempts have been made to address this issue. For example, in their Isle of Wight study, Stillman and Maychell (as cited in Galton et al., 2000) reported the development of guidelines for a transfer record which would meet the needs of receiving schools both in relation to presentation and content. This resulted in a number of working parties being set up but the outcomes were considered to be only partially successful in terms of facilitating curriculum continuity.

A number of studies have evaluated current arrangements for liaison between educators and other key stakeholders in the transition process. In a review of research in the UK looking at primary/secondary transfer in mainstream schools, Morgan (1999) identified problems with liaison, defined as contact between different stakeholders as one of three areas of concern. The range of stakeholders considered included professionals (subject teachers, class teachers and head teachers), parents and pupils. Interestingly, Morgan (1999) did not refer to other stakeholders who could well have a role in relation to students with additional support needs. Perhaps that was because her focus was on mainstream schools and she didn't choose to highlight the needs of children with additional support needs.

3.1.3 Personal and social aspects

This section will consider personal and social aspects relevant to the process of transition.

3.1.3.1 What are students' perceptions of the transition process with regard to personal and social aspects?

A number of researchers, exploring students' perceptions of the transition process, have considered personal and social aspects. In a questionnaire survey of children in their final year of primary school in nine schools in a Scottish city, Graham & Hill (2003) found that 89% of the students were looking forward to 'making new friends'. Negative views of the move were expressed. Using a fixed choice list, the researchers found that social and non-academic items were chosen more often than other items. For example

77% expressed concerns about getting lost, 55% worries about not knowing anyone and 53% concerns about getting picked on. As part of the same study, the views of these young people were followed up after one term in secondary school using questionnaires. Overall, the majority of the students had coped well with the transition although there were some indications that students from black and ethnic minority backgrounds, especially those of Asian ethnicity, had less positive views about secondary school.

In a study in Virginia State, USA, of eighth graders' written advice to prospective students in middle schools, Akos (2004) found that personal and social themes accounted for one quarter of all meaning units. The most common theme pertained to meeting new friends. A related theme was that of choosing friends carefully. The eighth graders provided advice to prospective middle school students on how to achieve these goals. The concept of personal agency was important in this regard. This included such advice as being nice, being yourself, having a positive attitude, self-belief and making good choices.

An interesting study by Pietarinen (1998) in Finland investigated rural students' experiences of the transfer to secondary school. Students were followed through from the sixth grade (primary school) to the seventh grade (secondary school). Although the students viewed school primarily as a place for learning cognitive skills, they recognized the important influence of teachers, and, especially, peers on teenagers' educational experiences, including helping them cope with the transition process. Pieterinen (1998)

argues that students from rural schools have greater difficulty coping with transition due to changes in the learning environments between primary and secondary schools. Although students from non-rural schools also experience changes, these changes are more marked for students transferring from rural schools. She refers to studies which have investigated the environmental and instructional advantages and disadvantages of small rural schools compared with large, non-rural schools to support her argument. She proposes a number of recommendations to address the potential difficulties faced by rural students including greater consultation and developing greater self-awareness of strengths and coping strategies.

In a later study, Pietarinen (2000) reports on a longitudinal study in Finland of pupils' experiences of transfer from primary to secondary school. The study took place in the context of plans to change the school system from separate primary and secondary schools to an "administratively integrated comprehensive school system" (p. 384). Prior to the change, pupils started school aged seven, had six years of primary school and then transferred to a secondary school serving a number of feeder primary schools. The pupils in this study were drawn from fourteen schools. Their experiences of school were sought at grade six (prior to transfer), grade seven (year following transfer) and grade nine (final stages of secondary school). Aims of the study included an examination of students' expectations, problems and fears and an exploration of their awareness and appreciation of their personal resources during this transitional period. From a theoretical perspective, the researcher considers the balance for the student between achieving the

developmental tasks of adolescence and meeting the demands and expectations of the school. The contrasting environments of the primary and secondary school are perceived as placing demands on the student at a developmental transitional stage. The process whereby the adolescent student makes sense of his/her strengths and skills in relation to the institutional transition is of interest to the researcher. Pietarinen (2000) used essay writing as the means of exploring students' process of adapting to the new educational context. According to the author, the use of a combination of qualitative and quantitative data analysis methods helped reveal underlying processes and strengthened interpretation of those processes. Pietarinen (2000) found that a significant number of the students perceived the transfer as "a positive and natural transition that was part of their life phase" (p. 388). Nevertheless, the majority of students (two-thirds) "experienced some disappointments, problems and fears" (p. 388). These expectations of ability to cope with the transition are, the researcher suggests, founded on a personal construction of self based on prior experiences. A gender difference emerged in that girls had clearer views of their personal strengths and aspirations compared to boys and are able to construct ways of coping which is effective for them. Personal relationships emerged as important. Teachers were seen as playing a significant role in facilitating social relationships. An expected finding was the importance of the social peer group during the transfer from primary to secondary school. The researcher recommends that more time should be spent in comprehensive schools to develop students' social skills.

As highlighted in an earlier section, Johnstone (2001) conducted an investigation into the perceptions of a small number of students moving from rural primary schools in Australia to high school. Two of the categories elicited using a grounded theory approach to data analysis could be subsumed under personal and social aspects. These were 'adaptation to social culture' and 'personal reactions and adaptations'. The first category took account of concerns about leaving the stability of peer relationships formed in the primary school to the insecurity of forming new social groups in the high school. The second category captured a range of feelings associated with the move. These included positive feelings, such as excitement and anticipation, as well as negative feelings, such as lonely, scared and nervous. Although the author recognized that these emotions related to social and organizational features, she felt that they merited a category in their own right. The researcher proposed a number of recommendations relating to personal and social aspects. These included the development of web-based resources to facilitate the development of social networks with older peers in the high school; with same aged peers in other primary schools; and with teachers and peer group leaders in the high schools.

3.1.3.2 What role do gender, class and race play in students' experiences of the transition from primary to secondary school?

As part of a larger study in Ireland which explored students' perceptions of transfer to second level (secondary) schools, O'Brien (2003) considered the role of gender and class in the transition process. This was a qualitative

study involving interviews with female students, their parents and teachers. Student interviews took place at three time points, once prior to transfer and twice afterwards, at the beginning and end of the first year in the second level school. Focus groups took place at the third time point. Gathering data across the transition divide avoids the difficulties which have occurred in studies relying on retrospective perceptions of the transfer process. A convenience random sampling method was adopted. Nevertheless, the researcher tried to ensure that the sample was representative based on type of school, location and socio-economic makeup. She was interested in comparing the perceptions of female students coming from different social class backgrounds. O'Brien (2003) refers to the identification of themes from the interview and focus group data, but it is not clear how these were extrapolated. Themes included emotional responses prior to transfer; student and parent involvement in the choice of second level school; academic identities post transfer; control measures used by schools in relation to students' appearance; friendships and peer groups; and homework and leisure time. The main conclusions were that girls from working-class backgrounds found the transfer more difficult emotionally, particularly if they were moving to a second level school outwith their immediate locality. In contrast, girls from middle class backgrounds were more confident about the move. To explain this finding, O'Brien (2003) argues that working-class girls encounter a culture of dominant middle-class and gendered norms, particularly in single sex convent schools. She suggests that their response to this ethos and various controlling mechanisms in the schools may lead to alienation and marginalization. It

was interesting to note the proposed role of peer group affiliations in the establishment and maintenance of social identity especially for the working-class girls. In general, it was argued that social identity was a stronger force than academic identity during the transition to second level schools. Although an interesting study of gendered identities during transition, it is suggested that these findings have limited generalisability outwith the Irish context. O'Brien (2003) concurs with this view. She recognizes that the Irish education system has unique characteristics, in particular, the large number of single-sex schools.

The role of peer group affiliations was explored in a UK study of the transfer from primary to secondary school. Pratt and George (2005) were interested in comparing and contrasting male and female students' perspectives. The study utilized semi-structured interviews and questionnaires to explore students' views immediately prior to the transfer and after the first term in secondary school. Data were analyzed to draw out key issues from the respondents. It was noted that the authors do not describe the methodology used to select these "key extracts" (p.17). They refer to "emerging themes and patterns" (p.18). In this author's view, this limits the potential for replication. Male and female students reported shared concerns around the disruption to friendship groupings but there were apparent gender differences. As the end of primary school became imminent, male students appeared to develop closer bonds with other male students. As an explanation of this phenomenon, the researchers suggest that this may be a way in which boys seek emotional and social support to negotiate the

transfer. In contrast, girls appeared to use the forthcoming transfer to legitimize changing friendships groupings. Similarly, all students shared issues of image and status but there were gender differences in how these were constructed. Boys tended to express such issues in physical terms whereas girls tended to use emotional and social terms.

Following on from an earlier study in a Scottish city, Caulfield et al. (2005) explored in more depth the experiences of students from black and minority ethnic (BME) backgrounds of the transition to secondary school. Over fifty young people in secondary one and two, aged eleven to thirteen years, were interviewed. The students reported positive views about some aspects of their personal and social experiences at secondary. They commented on having a greater choice of friends and expressed the view that secondary school had helped them to mature socially through involving them in decisions and promoting their sense of responsibility. A specific focus of this study was the exploration of the extent to which the students felt that their ethnicity was accepted in the secondary school context and whether they perceived differences between primary and secondary school. The students reported more racism in the secondary school context. The role of friendships and peer relationships was highlighted as a supportive factor in negotiating the transition process. In fact, pupils were more likely to confide in peers about racism and bullying than either parents or teachers. In considering implications for future practice, the researchers suggest developing systems which capitalize on the peer network such as buddy

systems and peer mediation systems, to counter potential difficulties of racism and bullying.

3.1.3.3 What role does anxiety play in the transition process?

A number of studies have considered the role of anxiety during periods of change such as transition to a new school. Firstly, let's consider studies which have looked at anticipatory anxiety prior to the move. As part of an investigation into the impact of transfer on friendships in boys and girls, Pratt and George (2005) found that the anticipated experience engendered stress and feelings of anxiety. The research considered whether there were gender differences in levels of anxiety. The researchers cited findings from a study (Orosan, Weine, Jason, & Johnson) which found that boys had higher anxiety levels than girls at the point of transfer from elementary school. In contrast, Pratt and George (2005) found that girls experienced anxiety levels similar to those of boys. Verbatim quotes are used in the paper to illustrate expressed student concerns associated with the transfer.

In another study of students' perceptions prior to transfer, Lucey and Reay (2000) investigated the nature and function of anxiety in the development of identity as children move to secondary school. The participants in this study were ninety children, aged nine to eleven years, in two primary schools in an inner London borough. Lucey and Reay draw on the work of object relations theorists, such as Winnicott (as cited in Lucey & Reay, 2000). They view anxiety in a positive light and see it as being necessary to the growth and ongoing development of the 'self' as it helps the individual to adapt to difficult

circumstances and new experiences. They consider the interaction between an individual's psychological makeup and social factors in relation to the nature and response to anxieties associated with secondary school transfer. From their analysis of the children's narratives, they report that although there was a universal anxiety in relation to the move, this was balanced by "more than just a 'tinge' of optimism" (Measor & Woods, as cited in Lucey & Reay, 2000, p. 194). They referred to "fearful excitement" (p.194) in some of the children's discourses associated with the sense of maturation that transfer to secondary school symbolizes. The sense of loss associated with the move is reframed as being "integral to the process of change" (p. 195). In the account, some aspects of the methodology are outlined but the authors do not provide detail of their data analysis method. A strength of the methodology, according to the authors, is that it does not rely on retrospective accounts but on contemporaneous views prior to transfer.

Secondly, let's consider studies which have considered anxiety post transfer. Lohaus, Ev Elben, Ball and Klein-Hessling (2004) conducted a study in Germany which investigated changes in psychological adjustment associated with the transition from elementary school to secondary school after fourth grade. The researchers were interested in whether previous studies which had found a reduction in stress levels following transition could be attributed to the relaxing effects of the school holiday period. The research paradigm thus involved the use of two control groups making transition between grade levels but without a change of school. The researchers addressed possible effects of repeated measures by including a third control group who were

assessed at only one time point. There were a large number of participants in the study (nearly four hundred) who were aged around ten years and came from fifteen elementary schools in Germany. Measurements utilized included a stress experience scale completed by the students; a youth self report questionnaire to assess somatic and psychological symptoms; and a child behaviour checklist to obtain a parental perspective. The main findings were a reduction in the level of stress and reported symptoms following transition. A gender difference was found in that girls had higher levels of stress experiences than boys. Furthermore, girls had higher internalising scores and boys had higher externalizing scores. By and large, the two repeated measures control groups provided similar findings. The results from the single measure control group suggest that repeating the measures have an effect and that this is greater for girls than for boys. The researchers suggest that participants, especially girls, may either over-report stress experiences and symptoms at the first administration or under-report at the second. An alternative explanation is, they suggest, due to "sample peculiarities" (p.169) in the single measure control group. Taking account of all these factors the researchers conclude that the school transition group shows a decrease in stress following transfer which they attribute to a recovery effect following the summer vacation. Furthermore, the measurements were administered a few weeks after the move allowing time for adjustment to the new situation. The two control groups moving between stages showed similar reductions in stress levels. It is of interest that further analysis revealed individual differences. Thus, although the overall picture for the school transition group was one of stress reduction about 30-40% of children "provide more negative

self-descriptions after this period” (p.172). A similar pattern was found for the repeated measures control groups suggesting that the effect is independent of a change of school and that there are children who cope less well with such changes.

3.1.3.4 What role do friendships and social relationships play in the transition process?

In a study of rural schools in Norway, Kvalsund (2000) explored the experiences of young people moving from primary and secondary school and, in particular, he compared the perceptions and experiences of young people transferring from different types of rural schools. In this research, Kvalsund (2000) adopted what he termed a ‘life course perspective’ which he defined as being “marked by the focus on socially created, socially recognized and shared turning points in a cultural system of age grading-a system that gives order and predictability to the course followed by individuals” (p. 402).

As such, this author would argue that Kvalsund is adopting the theoretical approach known as social constructionism. In its ontological stance, this approach views reality not as something which is ‘out there’ but as something which is constructed through social processes (Stainton Rogers, 2003). In relation to school transition, Kvalsund (2000) argues that meanings are constructed by pupils through the relations that they build up over time. Thus, social relationships and friendships are critical to the development and maintenance of shared understandings of key life events. He uses a combination of methods namely, field observations, network data and in-

depth interviews. In this study, network data comprise the different types of social interactions which students experience and engage in. Kvalsund (2000) uses a technique known as 'clique-analysis' to create four different categories of social groupings. In contrast to the integrated pattern of relations found in students from small rural schools, he discovered a segregated pattern of relations in students from larger rural schools. Qualitative data from interviews was used for triangulation purposes to validate the findings from the analysis of the quantitative network data. Kvalsund (2000) describes the contrasting experiences of students from larger rural schools with those from smaller rural schools as they make the transition to comprehensive secondary schools. Firstly, the pedagogy of these secondary schools is characterized by teacher-directed learning and a greater emphasis on individualization. Secondly, the social reality of these secondary schools is characterized by peer disapproval of play and social relationships which have clear divisions based on age and gender. In relation to these two aspects of pedagogy and social networks, students from smaller rural schools have to make greater adjustments than their peers from larger rural schools. However, they have the advantage of social support in the form of known older students who have already made the transition. Students in this position were viewed as the "lucky ones" (p.415) by students from the larger rural schools. .

In a study of a rural school system in North America, Pellegrini and Long (2002) considered the incidence and role of bullying and victimization as boys and girls make the transition from primary to secondary school at the

end of fifth grade. The research utilized multiple methods and sources to increase the validity of the findings. Furthermore, the longitudinal research design enabled the investigation of these aspects over time. Utilising dominance theory, the researchers predicted that there would be an initial increase followed by a decrease in bullying and other forms of proactive aggression following the transfer. In addition, they predicted that there would be a gender difference with boys displaying more bullying and aggressive behaviour than girls. Both hypotheses were substantiated by their findings. Dominance theory would predict that, during the period of transition, bullying would increase as a means of establishing dominance in a new peer group situation. However, following the establishment of dominance and status in the new peer group, the level of bullying and other forms of aggressive behaviour would decrease. The researchers propose that gender differences reflect differing perceptions of aggression and bullying in that they are viewed more positively by boys during the early period of adolescence. The researchers also explored changes in peer affiliation as young people made the transition. They found that there was a decrease in social affiliations in the sixth grade followed by an increase in the seventh grade. They suggest that these findings are in keeping with the move to a larger social institution and the need to establish and maintain new peer relationships.

3.1.3.5 What approaches have been used and what strategies have been advocated to facilitate personal and social aspects of the transition process?

A number of papers referred to the provision of preparatory programmes in order to facilitate the transition process. In the UK, Sellman (2000) describes a training programme and peer mentoring scheme for year six pupils in feeder primary schools linked to a secondary school in the West Midlands area. The programme was coordinated by secondary school staff working in conjunction with the West Midlands Quaker Peace Education Project (WMQPEP). It aimed to develop the year six students' skills in affirmation, communication, cooperation and problem solving. The peer mentoring scheme involved the training of volunteer year eleven/twelve peers from the secondary school as mediators. Some of the volunteer mediators attended the sessions in the feeder primary schools. Following transition, these older peers were assigned to tutor groups. Their role combined pastoral care and mediation functions. In this author's view, the evaluation of the programme appears fairly subjective referring to "informal feedback from pupils and staff evaluating this course" (p. 28). Nevertheless, the researchers felt that the programme had facilitated the transition for participating students; that the students had developed greater confidence; and acquired some skills in problem resolution either independently or with peer support.

Nelson (2003) describes a peer mentoring scheme in the north west of County Durham which was established to strengthen links between a secondary school and its feeder primary schools and ease the transition from primary to secondary school. The initial phase of the scheme was a pilot

project involving six participants. There were three mentors from year ten and three mentees from year seven in the secondary school. The pairings had met in the final week of the summer term prior to the year six students transferring to secondary school. Subsequent meetings during the mentees' first year at secondary school were determined by the students. The main aim for the mentees was to develop their self-confidence through widening their social network. It was also hoped that it would impact on their learning. The main aim for the mentors was to develop their self-confidence, sense of esteem, interpersonal skills, and self motivation and develop greater responsibility for their own learning. Evaluation of the pilot scheme utilized qualitative data from self-evaluation sheets and structured interviews with the students. Results are reported in descriptive terms. Triangulation is a widely used technique used in qualitative research to address threats to validity (Robson, 2002). In this study, there is some evidence of data triangulation through the use of more than one method of data collection (questionnaire and structured interview) and the views of both mentors and mentees were sought but they did not incorporate, say, the views of teachers. Thus, the study is reliant on the perspectives of the students. It is noted that this criticism is addressed in the second phase of the scheme as both pupils and teachers evaluated the work. Unfortunately, there is inadequate detail of the methodology employed during the second and third phases of the scheme. This detracts from the conclusion reached by the researcher that, in the third phase, the "mentees are more confident and find the transition from KS2 to KS3 less daunting than they had imagined" (p. 40)

3.1.4 Critique of literature on the transition of students

Section 3.1 has provided an overview of some of the literature on the transition of students between the primary and secondary stages of education. It has considered more than twenty sourced papers covering the period 1997 to 2005. Other literature will be discussed in section 4.9 of this review, which looks at some theoretical perspectives of transition.

In critiquing the studies considered in section 3.1, it has been decided to focus on aspects of research design. The following elements will be looked at:

- (a) Type of research
- (b) Focus of research
- (c) Context of the study
- (d) Sample size and sampling strategy
- (e) Types of data
- (f) Timing of data gathering
- (g) Analysis of data
- (h) Issues of reliability and validity

The 'type of research' is defined here in terms of the purpose and features of the research (Hart, 1998). In some instances, the purpose of the study has been made explicit by the researchers. In other cases, it has been possible to infer the purpose from the information provided. Hart (1998) suggests that the aims of social science research tend to fall under three categories, namely 'exploratory', 'descriptive' and 'explanatory'. The majority of the

sourced literature appeared to fall under the ‘exploratory’ (e.g. Akos, 2004; Besley, 2004; Pietarinen, 1998) and ‘descriptive’ categories (e.g. Johnstone, 2001). In addition, some studies attempted to provide an explanation for the phenomenon under study (e.g. Zanobini & Carmen Usai, 2002; O’Brien, 2003).

The ‘focus of research’ takes account of the “specific dimensions and aspects of the topic that were studied” (Hart, 1998, p. 49). It was noted that a majority of the studies focused on the views and transition experiences of students (e.g. Tobbell, 2003; Graham & Hill, 2003; Pointon, 2000). On the one hand, it could be argued that this focus enlightens our understanding of the attitudes of students and places value on the importance of their views. On the other hand, it could be argued that restricting the focus to the perspectives of one group limits and possibly skews our understanding of the phenomenon. To address arguments such as these, some of the studies took account of the views of other key stakeholders such as parents and teachers (Lohaus et al., 2004; Sellman, 2000; O’Brien, 2003).

The context for the research in section 3.1 was wide ranging. Just under half of the papers focused exclusively on the UK context. The remaining papers considered research in the USA, New Zealand, Italy, Finland, Ireland, Germany and Norway. In reading the papers, this author found it helpful to move beyond an egocentric focus on the Scottish and/or UK context. This enabled a consideration of different cultural traditions; and educational systems and structures. In considering the applicability of these findings to

the Scottish context, it may be possible to identify general principles to inform practice and/or generate potential avenues for further research in the Scottish context.

Sample sizes in the reviewed literature varied greatly. Some studies were small-scale and tended to utilise qualitative methodologies (e.g. Johnstone, 2001; Pointon, 2000). However, there were examples of larger scale studies which also adopted qualitative methods (e.g. Akos, 2004; Pietarinen, 1998). Information on sampling strategy tended not to feature. It was more common for researchers to provide parameters in relation to the target population of the study. Examples included students selected from a secondary school and its feeder primary schools (Nelson, 2003) and the cohort of all students in primary seven and secondary one in one local authority (Besley, 2004). In some instances, researchers commented on the limited generalisability of their findings due to the context (O'Brien, 2003). Studies which have been commissioned for a specific purpose such as informing policy and practice in a particular geographical area or authority were not intended to be generalized beyond that context (Besley, 2004).

Many of the studies utilised qualitative data. A range of methods were employed, including semi-structured interviews with students (e.g. Ward, 2000; Pratt & George, 2005); interviews with parents and teachers (e.g. O'Brien, 2003); essays written by students (e.g. Akos, 2004; Pietarinen, 1998) and focus groups with students (e.g. Tobbell, 2003; Besley, 2004). Other studies incorporated quantitative data. Methods included

questionnaire surveys (e.g. Mann, 1997); norm-referenced measurement instruments completed by students, teachers and parents (e.g. Zanobini & Carmen Usai, 2002; Pellegrini & Long, 2002; Lohaus et al., 2004); school grades (e.g. Zanobini & Carmen Usai, 2002; Oracle study, as cited in Galton et al., 1999); and network data from network analysis (e.g. Kvalsund, 2000)

The timing of data gathering is interesting. In relation, to studies which have focused on students' experiences of transition, some have only gathered data before the transfer (e.g. Lucey & Reay, 2000); others only after the transfer (e.g. Lohaus et al., 2004); whereas others have provided information across the transition divide (e.g. Pratt & George, 2005; O'Brien, 2003). It could be argued that there are difficulties in utilising retrospective views of transition and that longitudinal studies enable the views of students to be followed as they go through the process of changing schools. Another element of variation relates to the number of data gathering points and the timings, whether before or after the transfer. Prior to transfer, some studies gathered data a few weeks before the students left the primary or elementary school (e.g. Johnstone, 2001) whereas other have gathered information over a much longer time period before the change (e.g. Ward, 2000). Similarly, post transfer, some studies gathered data at one time point only a few weeks after moving to the new school (e.g. Lohaus et al., 2004; Pratt & George, 2005) whereas others have gathered data at various time points and over a longer time period of one or two years following the transfer (e.g. Pellegrini & Long, 2002). In this author's opinion, there are potential dangers in restricting either the time period or the number of points of data collection.

By lengthening the time period before or after transfer, you are able to gain a fuller picture of any changes which may occur. For example, it would appear reasonable to argue that the students' views of secondary school after one term may well be quite different from their perceptions at the end of the first year or the end of the second year. It is one element of the research design to consider when evaluating the claims made by researchers.

As noted earlier, the majority of the studies utilised qualitative data. A variety of data analysis methods have been employed. These have included a grounded theory approach (e.g. Johnstone, 2001; Tobbell, 2003); various forms of content analysis (e.g. Akos, 2004); and methods which report verbatim participants' comments to illustrate conceptual themes (e.g. O'Brien, 2003; Lucey & Reay, 2000). Some researchers have failed to provide sufficient detail of the data analysis method. For example, Pratt and George (2005) simply refer to "emerging themes and patterns were identified" (p.18). This limits the potential for other researchers to replicate the study. However, many of the studies were small-scale and exploratory in nature and it may well not have been the researchers' intention to generalize from the findings.

Triangulation is a widely used technique in qualitative research to address threats to validity (Robson, 2002). This could involve more than one data collection method and/or more than one source. There is variation in the degree to which this aspect has been addressed in the papers reviewed. Some studies have utilised multiple data sources (e.g. Pellegrini & Long,

2002; Lohaus et al., 2004); some have employed more than one data collection method (e.g. Nelson, 2003); and some have used a combination of multiple data sources and multiple data collection methods (e.g. Nelson, 2003; O'Brien, 2003). Issues of reliability have emerged in a few studies. For example, in analyzing data from a 1998 OFSTED report into standards and qualities in schools, Galton et al. (1999) commented on difficulties with the reliability of evidence based on inspectors' judgements of pupil performance.

In summary, in this literature there is strong emphasis on qualitative research methods and a focus on students' perspectives of the transition to secondary school (or its equivalent). There was only one study which utilised what appeared to be a quasi-experimental design (Lohaus et al., 2004). This involved comparison between a group of students moving from elementary to secondary school and two 'control' groups moving from one grade to another in elementary school. Although not an intervention in the normal sense, the change of schools group could be construed as having experienced a form of naturally occurring intervention. The literature is less strong in relation to evaluation of strategies which may facilitate students' transfer between schools.

3.2. Transition from primary to secondary school for students with autism spectrum disorder

Reference to the transition difficulties of children and young people with ASD is found in general textbooks and other literature in the area of ASD.

Difficulties coping with changes in routine are associated with the triad of impairment especially flexibility of thought (Public Health Institute for Scotland, 2001; Ennis & Manns, 2004). This results in difficulties with transition whether of a micro-nature (e.g. moving between activities) or of a macro-nature (e.g. moving between schools). The emphasis appears to be on practical approaches and strategies based on practitioners' experiences of working with children and young people with ASD (Preston, 1998; Williams, 1995; Connor, 1999).

This author sourced only four research documents which focused on the transition of children with ASD moving between the primary and secondary stages of education. Two of the reports (Ennis & Manns, 2004, and Larney & Quigley, 2006) had insufficient detail to enable a full analysis and critique by this writer. These reports appeared to focus on the practical implications of the research and appear to be mainly targeted at practitioners and/or policy makers.

3.2.1 Paper 1: Ennis and Manns (2004)

Ennis and Manns (2004) report on a partnership project funded by the Department for Education and Science (DfES) in England. The authors provide a clear aim for the project, namely to "address the social and curriculum related difficulties faced by pupils with Asperger syndrome during the period of transition from primary to secondary mainstream education" (p.4). The focus of the study was the transition of sixteen pupils with a diagnosis of Asperger syndrome. Reference is made to 'working' with the

students, their parents and school staff although the nature of this relationship is not elaborated. Furthermore, there is no information on the number of participating parents and staff. A definition of Asperger Syndrome is provided. The triad of impairments is used with illustrative examples of the associated difficulties in each element of the triad. The authors use the term 'collecting' when referring to the guidelines which emerged through the research process. These guidelines are proposed as 'good practice' in meeting the needs of students with Asperger syndrome going through the primary to secondary school transition process. Again, we are not provided with adequate detail to critique the process. The remaining sections of the report outline these guidelines including illustrated examples of potential difficulties with suggested strategies. Supporting materials and further sources of information are provided.

3.2.2 Paper 2: Larney and Quigley (2006)

Larney and Quigley (2006) describe a project carried out in one local authority in Scotland. The rationale for the project appears to have two elements. Firstly, the authors note that the council has a commitment to a "policy of inclusion" (p. 2). The reader can reasonably infer that the project contributes to the implementation of this policy. Secondly, the psychological service received a request from the council during session 2004-2005 "to explore the supports currently in place for children with social or communication difficulties such as autistic spectrum disorders (ASD) who have recently made the move from primary to secondary school" (p. 2). What is not specified is the rationale for this request from the council.

The authors provide two clear objectives for the project.

The first objective explored the effectiveness of the primary to secondary transition arrangements for a group of six West Dunbartonshire pupils who are on the autistic spectrum. The second objective investigated the range of transition support arrangements that have been employed in the past for pupils with ASD and the extent to which these arrangements were considered adequate.

(Larney & Quigley, 2006, p. 2)

The type of research would appear to be a mixture of summative and formative evaluation (Hart, 1998). The evaluative element is encapsulated in the use of the term 'effectiveness' in the first objective. The research incorporates a summative component in evaluating current practice in the council in relation to transition support arrangements. The formative component is evident from the intent to utilize the findings from the research to inform future policy and practice in the council.

The goals of the research are mainly exploratory and descriptive (Hart, 1998) as the study seeks to describe current practice in the council and in other authorities. Furthermore, it aims to provide a better understanding and illumination of the transition support arrangements in the council.

It is not clear from the article the extent of the survey conducted in "other local educational authorities" (p. 2). In particular, whether it was restricted to authorities in Scotland (this is assumed to be the case) or extended to other areas of the UK.

Limited information is provided on a number of aspects of the research methodology including sampling strategy, measurement instruments, types of data, and data analysis. Detailed findings are not available although main findings are summarized in the text. This author recognizes the constraints presented by the word limit of the article in making this observation.

A literature review was conducted as part of the project. The focus of the review was the exploration of “good practice in the area of supporting pupils during the primary to secondary transition” (p. 2). There is no specific mention of references pertaining to pupils with ASD. However, in the main findings, the authors report that the literature review indicated six factors that would result in more effective facilitation during the transition phase for pupils on the autistic spectrum. It is not clear whether this finding was based on the assumption that transition arrangements for all children could be generalized to pupils with ASD and/or whether it took account of research into the transition of pupils with ASD from primary to secondary school. There is only one cited reference (Johnstone & Patrone, as cited in Larney & Quigley, 2006) which has a clear focus on pupils with ASD. Furthermore, the authors do not elaborate on the basis for concluding that these six factors will result in ‘effective’ facilitation. This is significant in that the researchers utilize these six factors to evaluate current practice in the authority. This would raise questions regarding the validity of the findings.

The rest of the article focuses on applied aspects of the research findings and makes a number of recommendations in relation to policy and practice in the council.

Two of the sourced reports of research into the transition of students with ASD from primary to secondary school provided sufficient detail to enable a more in-depth analysis and critique (Johnstone & Patrone, 2003; Douglas, 2002).

3.2.3 Paper 3: Johnstone and Patrone (2003)

The purpose of this research appears to be illuminative with the aim of answering the question which forms the title of the report. The focus of the study is a series of case studies of children in transition between different educational placements incorporating an exploration of the views of key stakeholders.

In the introduction section, the authors refer to macro-transitions. The use of this term implies that there are other types of transitions which children encounter in the educational context. Macro-transitions are defined as “natural transitions at the pre-school/primary and primary/secondary stages. Children may also move between mainstream and specialist resources” (p.99). A distinction is made here between natural transitions which apply to all children and those which apply to children who have experience of education in a specialist resource.

The authors adopt a particular philosophical perspective in relation to inclusion in the curricular and social aspects of the school and classroom. This argument is supported by reference to recent legislative and policy documents.

The researchers propose that the nature of the difficulties experienced by children with autistic spectrum disorder make macro-transitions more difficult than they would be for other children. They adopt the standpoint that children learn to cope with the transition process through the help they get from others (peers, parents, and school staff) and from the social skills they learn.

The aim of the study was to identify elements of good practice in the management of transitions. In this context, transitions refer to macro-transitions. The authors focus on the concept of effectiveness rather than efficacy suggesting that they are interested in what works in real life practice rather than what works under ideal conditions. Referring to the diversity of practice within and across education authorities, they propose that “underlying principles are likely to be generalisable across the range of education settings” (p. 99). While this is a laudable aim, this author questions the basis on which this statement was made. The authors use the metaphor ‘key to successful transitions’ suggesting that there is an answer which will, continuing this analogy, unlock the door to successful outcomes for children and young people in transition.

In the background section of the report, the researchers consider the linked concepts of children's rights and consultation. Reference is made to all children, but those children who have special educational needs (SEN) are singled out for particular mention. The role of education in facilitating children's development and helping them reach their potential is emphasized with particular reference to the Special Educational Needs and Disability Act 2001 (as cited in Johnstone & Patrone, 2003). The authors argue that their interest and focus on transitions is supported by forthcoming legislation which, it is anticipated, will reinforce the importance of transitions for children and young people with additional support needs. Further justification for the study is considered in the section on the incidence of autistic spectrum disorder. Although recognizing difficulties in establishing accurate prevalence figures for ASD, the writers point out that "most schools, at some stage, will need to make provision for a pupil on the autistic spectrum" (p. 102).

The study was conducted in two local authorities in Scotland with contrasting demographic profiles, providing, the authors argue, a "spread of situation and provision" (p. 104). Descriptive information is provided for the local authority contexts including current provision for pupils with ASD.

The literature review section of the report is quite brief (about one A4 page). The authors revisit the concept of inclusion. Interestingly, the authors appear to agree with a compromise position expressed in the Public Health Institute

of Scotland (2001) report. They use the term 'realistically' when referring to the reports' adopted stance; namely that although social inclusion is a laudable aim, it may be desirable to meet individual needs through ASD specific or residential services. In the final paragraph, the authors return to the theme of identification and utility of procedural guidelines and checklists to manage transitions. Reference is made to two recent documents which focus on this area.

In the research methods section, the authors express a guiding principle for their research, namely "finding and identifying existing good practice" (p.103). The language used would suggest exploratory and action orientation dimensions to the study. A philosophical stance to research is adopted which appears to lie within the interpretivistic methodological tradition (Hart, 1998). Interestingly, the researchers make a link between the practice of educational psychologists and research arguing that the context for effective practice is "characterized by collaboration and consultation" (p.104). This argument is not backed up by supporting evidence.

In this study, the views of teachers were sought to confirm or refute the researchers' view that the management of change and transition should be construed as a key skill when working with students on the autistic spectrum.

The data collection methods utilized were questionnaires (teachers and parents) and interviews (pupils). Sample sizes were relatively small for which the authors blame a combination of time constraints and interview

format, which restricted the participating students to those with either Asperger syndrome or at the more able end of the spectrum. The authors suggest that different methods of elicitation (e.g. pictographs) with less able pupils could have been considered if more time had been available. There are no supporting references to studies that have used 'pictographs' to elicit the views of less able children on the spectrum. The richness, quality and relevance of the data are emphasized with two case studies providing further qualitative data. Latterly, the authors introduce the hypothesis that better management of transitions would "reduce stress and lead to more positive outcomes for all concerned" (p.105). The 'all concerned' is not specified. This reference can be linked to the introduction section of the report where there was reference to the stressful nature of transitions for "parents, family and schools" (p.99). So perhaps the 'all concerned' refers to these groups.

Questionnaires (teacher and parent) and interview (pupil) schedules are appended to the report. The authors do not describe the construction of these measurement instruments. Analysis of the teacher questionnaire reveals a mixture of closed and open questions. The parent questionnaire is mainly comprised of open questions. The pupil interview schedule appears to be semi-structured in format.

Data obtained from all three measurement instruments is mainly qualitative. Some quantitative data was obtained (e.g. rating scales) and was subjected to descriptive statistical analysis. A range of qualitative data analysis methods was employed. Some of the qualitative data was subjected to a

form of thematic analysis e.g. the responses from three of the questions in the teacher questionnaire were clustered into three dimensions. Some of the parent questionnaire responses are reported under headings pertaining to particular questions. Another method adopted by the authors is to use selected verbatim comments by parents to back up their descriptive analysis of findings.

In the pupil sample, a range of developmental difficulties and educational placements were represented. Only two out of the ten case studies involved transition from primary to secondary school. One was a child moving from a mainstream primary to a mainstream secondary whereas the other was from a mainstream primary communication unit to a mainstream secondary communication unit.

Perceptions of the transition process were retrospective. There is no indication as to the timescale i.e. at what stage in the academic year the data was gathered. In the reporting of the findings, there is no distinction made between the different stages or types of transition i.e. all ten transitions are grouped together in the reporting process. In the teacher questionnaire, respondents were asked to “think about one pupil with autistic spectrum disorder who you have taught and have also supported through a change of placement or transition” (p.125). This would imply that the teachers were not necessarily considering any of the 10 children for whom we have parental perspectives. Thus, although there are multiple data sources in this study, triangulation is limited to the parental and child data. The number of children

interviewed was 50% of the overall sample due largely, if not entirely, to the adopted methodology. The authors describe two methodologies which offer potential in eliciting children's views. Time constraints prevented the incorporation of such approaches in this study. However, they do offer interesting possibilities for future research.

In the discussion and analysis section of the paper, the authors propose a transitions matrix as a useful framework for the transition process. They also provide a list of techniques to facilitate the implementation of the transition plan. They do not specify the derivation of these techniques i.e. whether based on the findings of this study or from other research.

In conclusion, this is an interesting qualitative investigation into the transition process for children with ASD at different educational stages and involving a diversity of transition routes. Strengths of the study are the richness of the data offering insights into the process of transition from a range of stakeholders. The transition matrix would appear to have potential to be generalized beyond the contexts of this study. What is not clear is the derivation of the matrix, whether based on the results of this study, other studies, or established effective practice.

3.2.4 Paper 4: Douglas (2002)

This analysis and critique will focus on those aspects of the thesis of direct relevance to this literature review.

Douglas (2002) provides a clear rationale for this study based on the dimensions of inclusive education; issues concerning the continuity and progression of children between different phases of education; and the particular challenges associated with the transition of children with ASD. Furthermore, at the local authority level, there was an identified need to develop better transition arrangements for children with ASD moving from primary to secondary school (McAdam & Johnstone, 2001).

The research is described as being “a multiple explorative case study” (p.7). There is a dual purpose of evaluating current policy and practice and informing future strategy within the local authority. This action orientation is evident in the stated intention “to appraise the options available for development of policy and practice on inclusion of children with ASD at the P7-S1 transition” (p.10).

Within the wide ranging scope of the literature review, three sub-sections focus on the transition from primary to secondary school. The first section considers the components of transition arrangements. In relation to primary-secondary transfer, none of the literature concerned children with ASD; two papers considered children with special educational needs (SEN); and the remaining studies focused on the general student population. Looking at the research context, it was limited to the United Kingdom (UK) and North American contexts. There was no mention of differences in these education systems which would help to set the studies in context and assess the generalisability of findings from one context to another. The second sub-

section considers the well-documented literature on the decline in performance associated with the transfer to secondary school. Again, studies are restricted to the UK and North American contexts with similar findings emerging. The third sub-section focuses on affective aspects of the transition process. In conclusion, the themes emerging from these three sub-sections could be grouped under the three overarching themes of physical and organizational; academic and curricular; and personal and social. This conceptual categorization has been used to structure section 3.1 of this review.

Douglas (2002) has included a sub-section on the theoretical stance of the study. In relation to the nature of research enquiry, a critical realism stance has been adopted. This is set within the context of the debate on approaches to 'social scientific enquiry'. An exposition of the debate is provided including an argument for the adoption of a critical realism stance. Douglas (2002) adopts a framework for data analysis and interpretation (Miles & Huberman, as cited in Douglas, 2002). He argues that this approach is compatible with a critical realism model of social scientific enquiry. Furthermore, he proposes that this enables the identification and assessment of causal relationships "between variables and processes" (p.45). Douglas (2002) invites the reader to collaborate in the process of critical evaluation of conclusions. The strength of this argument is weakened by the apparent absence of any critique of this framework.

In relation to data collection methods, Douglas (2002) has adopted a consultation approach to interviewing. He argues that it is possible to draw on and integrate a range of theoretical perspectives, including ecological theory, attribution theory and social cognition, personal construct theory, systems theory, a social constructionist perspective, and solution focused brief therapy. He does not provide a critique of these theoretical stances, instead he argues for the utility of these approaches using supporting references. Examples of possible applications include the utility of the ecological model in relation to decision making about the education of a child with ASD; and the use of attribution theory and social cognition to facilitate stakeholders' understanding of other stakeholders' behaviour in the transition process. There are instances where he does provide an opposing view or a cautious stance. An example of this is in relation to the utility of systems theory to facilitate change in light of stakeholders' desire to maintain the status quo. Douglas (2002) was able to address a potential argument against the use of personal construct theory in this study. Although this theory could, he suggests, be aligned to the constructivist research paradigm, he adopts the position of Stevens (as cited in Douglas, 2002) with regard to its compatibility with a critical realism stance.

Douglas (2002) has considered and addressed the validity of his findings. Firstly, he is explicit about his qualifications and background, namely that of a trainee psychologist. This is important from the perspective of potential investigator bias or influence. Threats to validity were addressed through the use of triangulation and employing multiple sources of data (Robson, 2002).

Furthermore, as noted earlier, he has invited the reader to collaborate in the process of critical evaluation of his conclusions, thus assessing the validity of his findings.

In relation to the sampling strategy, Douglas (2002) describes selection of the children based on specified criteria namely having a “communication disorder listed as their main area of difficulty” (p.53), and “about to make the transition to secondary school in the year of the study” (p.54). The information source was the “central database in the host psychological service” (p. 53 -54). Although not specified, this appears to meet the criteria for a purposive sampling strategy. In purposive sampling “respondents are chosen because they have particular features or characteristics which will enable detailed exploration of the research objectives” (National Statistics, 2005, para. 2).

In relation to ethical matters, informed consent was obtained from the parents. However, the issues of informed consent from the children and the provision of opportunities to dissent are not specified. Issues of data protection and storage are not discussed. Anonymity issues have been addressed in the reporting of results.

Looking at the data collection methods, detailed information is provided regarding the development of the semi-structured interview schedules. The pilot stage involved interviews with key stakeholders associated with a child who had ASD and physical impairment and was making the transition to secondary school.

Data gathered from the semi-structured interviews was mainly qualitative in nature. The method of data management is described. Confirmatory content analysis was utilized following a procedure advocated by Weber (as cited in Douglas, 2002). Reliability issues were addressed through a careful process of assessment of inter-coder reliability at various stages of analysis using a coder who was unfamiliar with the aims and purposes of the research. Themes were identified from the interview data using this process.

In the results section, data are presented in tabular and textual formats. Detailed information is provided on the five children, including age, gender, diagnosis, age at diagnosis, current primary school placement, proposed secondary school placement, transition routes and transition arrangements.

Descriptive statistical analysis has been applied to scaling questions included in the interviews with key stakeholders. Means and standard deviations have been calculated for the scaled scores. Although interval data are required in order to perform such analyses, Douglas (2002) has not made this assumption explicit. Comparisons are made between the means of the scaled scores for the different stakeholders. Douglas (2002) reaches conclusions based on apparent differences in the magnitude of scaled scores for different stakeholders.

In the interpretation of results, delay in transition arrangements is identified as a predominant theme which had a negative impact on the transition

process for routes involving a specialist placement. However, only one of the case studies involved transition from mainstream primary to mainstream secondary and in this instance there was no effect from delay in transition arrangements. In this author's view, this finding was influenced by the unique characteristics of the sample children and their education transition routes

In the discussion section, Douglas (2002) comments on the diversity of transition routes in the five case studies. He argues that there was a "widespread preparedness to implement structured and comprehensive transition programmes that were highly congruent with the best practice in the UK and North America" (p. 88). This author would question aspects of that argument on the basis that the cited references are not specific to children with ASD. It could be argued that effective transition practices for the general student population could be applied to children with ASD but this is not elucidated by the researcher.

Douglas (2002) articulates some of the limitations of the study. He refers to aspects of the data collection method, in particular the decision not to make audio recordings of the interviews. He points out some of the advantages and disadvantages of this decision including an awareness of the dangers of potential researcher bias. He recognizes that some of the reported findings from the interview questions are based on small samples. He is aware that some of the conclusions drawn from analysis of the interview data are more

speculative in nature as he attempted to balance a rigorous approach with a richer interpretation of the findings.

Finally, let's evaluate the utility of the findings and conclusions. As noted earlier, only one of the five case studies involved transition from mainstream primary to mainstream secondary. Stakeholders' concerns about the negative impact of delays in placement decisions should be viewed in this context. Douglas (2002) makes recommendations for changes in the system of decision making around transition, with particular reference to the secondary transition stage. He recommends the establishment of an 'autism assessment team' based on the existing joint assessment model for diagnosis but expanded to include parents and teachers. In conclusion, this study provides a rich, qualitative investigation into the transition from primary to secondary school of a small sample of children in one authority in Scotland. It is this author's contention that the recommendations are pertinent to the area within which the investigation took place but that there are limitations to the generalisability of the findings to other contexts.

4 Discussion

4.1 What are the experiences of students making the transition from the primary to secondary stages of education?

Students' concerns about organizational aspects of the move from the primary to the secondary stages of education, such as getting lost and finding their way between classes, have been articulated by a number of researchers (Akos, 2004; Johnstone, 2001; Ward, 2000). Some of these organizational problems, such as the lack of flexibility in secondary school timetabling, were viewed negatively and seen as impacting on students' learning experiences but other features, such as the breadth of subjects, were viewed positively (Tobbell, 2003). Fortunately, there is evidence that some of these concerns are temporal in nature and that they reduce after the students have been in secondary school for a few months (Akos & Galassi, as cited in Akos, 2004; Ward, 2000). Temporal aspects of transition tend to pertain to physical elements of the new environment such as size and layout. Following transfer, such concerns are replaced with worries about teacher differences with regard to style and management and students' organizational skills (Johnstone, 2001), social worries (Ward, 2000) and having to deal with a large number and range of teachers (Tobbell, 2003).

A number of studies have explored students' views of differences in the learning environment between primary and secondary schools. Prior to transfer to secondary school, students look forward to broadening their learning experiences and being introduced to new subjects (Graham & Hill,

2003). Some negative expectations about secondary school have been identified, such as having more homework, but these worries reduce following transfer (Graham & Hill, 2003). On a positive note, following transfer students report satisfaction with the breadth and variety of subjects in secondary school (Besley, 2004); and opportunities for more movement (Pointon, 2000). In contrast, following transfer concerns have been expressed about the sense of loss of ownership of personal space (Pointon, 2000) and comments about a shift from collaborative to individualized forms of learning (Tobbell, 2003)

The experiences of students from black and ethnic minority backgrounds making the transition to secondary school have been considered in a few of the sourced studies. There is some evidence that students from ethnic minority backgrounds are less positive about the move to secondary school (Graham & Hill, 2003). In follow-up studies the same students reported positive views of their learning experiences in secondary school (Caulfield et al., 2005).

There is a well established literature on the impact of school transfer on students' progress some of which was sourced for the purposes of this review. Firstly, a positive relationship has been found between adjustment to secondary school and academic progress (Nisbet & Entwistle, as cited in Galton et al., 1999). There is evidence of a 'hiatus' in progress whereby the trend is for pupils' attainments to 'dip' , or 'stand still' following transfer (Galton et al., 1999; Suffock, LEA, as cited in Galton et al., 1999; Galton,

Hargreaves, Comber, & Wall, as cited in Galton et al., 1999). Other investigations into the impact of transfer on academic progress have utilised other data sources such as OFSTED inspectors' judgments of attainment levels (Galton et al., 1999). These provide a similar picture of a relative drop in pupil attainment following to secondary school.

A full consideration of the relationship between motivation and learning is outwith the scope of this review. The relationship between motivation and achievement was explored in a number of the sourced papers. There is evidence of a reduction in motivation levels following an initial period of adjustment, which has been attributed to a loss of self-esteem (Demetriou et al., 2000; Galton, Hargreaves, Comber, & Wall, as cited in Galton et al., 1999). It has been suggested that students' feelings of competence in dealing with a new situation (middle school) result in higher levels of achievement motivation (Zanobini & Carmen Usai, 2002). This author is of the view that finding ways of facilitating this sense of competence in students could lead to an increase in levels of motivation and educational achievement.

A number of studies have explored students' views of personal and social aspects of the transition between the primary and secondary stages of education. Prior to transfer to secondary school, students look forward to making new friends (Graham & Hill, 2003). Identified negative social aspects about the anticipated move to secondary school include not knowing anyone, worries about being picked on; and concerns about leaving the stability of

peer relationships formed in the primary school to the insecurity of forming new social groups in the high school. (Graham & Hill, 2003; Johnstone, 2001). Teachers are also seen as playing a significant role in facilitating social relationships (Pietarinen, 2000).

The role of peers in helping students negotiate the transition has been highlighted in a number of studies (Pietarinen, 1998; Pietarinen, 2000; Pratt & George, 2005; Caulfield, Hill, & Shelton, 2005). Taking a social constructionist perspective, Kvalsund (2000) sees social relationships and friendships as critical to the development and maintenance of shared understandings of key life events such as transfer to a new school.

Gender differences have been found with regard to the role of same sex peers during transition, and in the expression of image and status issues (Pratt & George, 2005). Taking a dominance theory perspective, Pellegrini and Long (2002) predicted and found that levels of bullying and other forms of proactive aggression initially increased then decreased following school transfer. This was construed as a means of establishing dominance in a new peer group situation and was more prevalent in boys than girls.

Black and ethnic minority students' perceptions of learning experiences were reported earlier (Caulfield, et al., 2005). From a personal and social perspective, there were positive and negative dimensions. The former included references to having a greater choice of friends. The latter included reference to more perceived racism in the secondary school context. The

role of friendships and peer relationships was again highlighted as a supportive factor in negotiating the transition process.

Prior to transfer, there is evidence that, for a number of students, the anticipated move to secondary school engenders stress and feelings of anxiety (Pratt & George, 2005). Some writers have viewed anxiety as having a constructive function in helping the individual adapt to a new situation (Lucey & Reay, 2000).

Others have suggested that increased levels of anxiety are experienced by students prior to any significant educational transition, such as year to year, as well as school to school (Lohaus, et al., 2004). They also propose that there are individual differences in the ability to adapt to change.

There are equivocal views as to whether there are gender differences in the levels of anxiety associated with transfer, with some studies finding girls with higher levels; some reporting higher levels in boys and some no difference (Pratt & George, 2005; Orosan, Weine, Jason, & Johnson, as cited in Pratt & George, 2005; Lohaus, et al., 2004).

4.2. What approaches have been advocated to facilitate the transition of students from the primary to secondary stages of education?

Some writers have advocated the use of transition programmes to facilitate the transition of children and young people between different stages of the education system (Mizelle, 1999; Carter et al., 2005). Suggested strategies

which have been advocated include the provision of written information about the school; hearing first hand experiences from current students; meetings and discussions with teaching staff; familiarization visits; managing the timetable; and finding way round the school (Mizelle, 1999). Similarly, it has been suggested that parents should be given information in order to assist their children in the transition process (Mizelle 1999; Gill, as cited in Kapasi & Hancock, 2006).

Others have suggested changing the organisation of the teaching arrangements in the secondary school such as having the students taught in the same room with different subject teachers and greater collaboration between teachers with regard to teaching styles, expectations and management approaches (Johnstone, 2001).

Explanations for the evident 'dip' or 'hiatus' in students' progress following a change of school have focused on the issue of curriculum discontinuity (HMI, as cited in Mann, 1997). The national curriculum was introduced in England and Wales in 1988 in an attempt to address this issue. Improved liaison between educators; improved liaison between educators and other key stakeholders; and better transfer of information about students have been advocated (Mizelle, 1999; Morgan, 1999). Differences in learning and teaching practices between primary and secondary schools are considered to be another factor impacting on continuity across the transition divide (Galton & Willcocks; Delamont & Galton, both cited in Galton et al., 1999). Another approach has been to advocate teaching students academic skills, such as

skim reading and note taking, which will be useful in the secondary school context (Kapasi & Hancock, 2006).

In relation to the personal and social aspects of transition, it has been recommended that more time should be spent in comprehensive schools to develop students' social skills (Kurtz, as cited in Pietarinen, 2000). Specific recommendations have included the development of web-based resources to facilitate the development of social networks with older peers in the high school, same aged peers in other primary schools, and teachers and other adults in the high schools (Johnstone, 2001). Peer mentoring schemes involving older peers have been advocated by a number of researchers (Sellman, 2000; Nelson, 2003). In relation to students from black and ethnic minority backgrounds, the development of buddy systems and peer mediation systems has been recommended to counter potential difficulties of racism and bullying (Caulfield et al., 2005).

4.3 How effective have these approaches been?

In relation to the physical and organizational aspects of the transfer, a number of strategies have been advocated. It is not clear from the sourced literature whether these approaches have been rigorously evaluated. There appears to be limited evidence from small scale studies that the provision of information such as timetables and maps helps students feel more secure (Ward, 2000).

With regard to academic and curricular aspects, the introduction of the National Curriculum in England and Wales in 1988 appears to have had a variable impact on practice. A number of local authorities made efforts through such practices as cross-phase curriculum projects; agreed curriculum policies and practices; and cross-curricular themes bridging years six and seven (Mann, 1997). Despite such initiatives, studies have demonstrated instances whereby students were being given work at an earlier level and/or were being started at the same level without cognizance of prior learning (Galton et al., 2000; Gorwood, as cited in Galton et al., 2000).

Efforts to improve liaison between educators have had mixed results with some studies finding evidence of poor practice (Stillman & Maychell, as cited in Morgan, 1999; BEDC, as cited in Galton et al., 2000). Measures to improve the transfer of information and the use that is made of that information have had mixed results in terms of curriculum continuity (DES, as cited in Galton et al., 2000; Stillman & Maychell, as cited in Galton et al., 2000). In relation to children with additional support needs, special educational needs coordinators (SENCOs) have reported difficulties with the content and usefulness of individualised educational programmes (IEPs) developed in primary schools (Kapasi & Hancock, 2006). Problems in liaison between educators and other stakeholders have been found (Morgan, 1999).

Efforts to bridge differences in learning and teaching methods, such as the use of teaching and learning approaches in the secondary school which build

on those used in the primary school (Mann, 1997) have had a variable impact. Students experience clear differences in the teaching and learning methods adopted by primary and secondary teachers (Tobbell, 2003).

Peer mentoring schemes to facilitate the transition process have been the subject of a number of investigations. Of those reviewed for this report, positive effects were reported (Sellman, 2000; Nelson, 2003). Unfortunately, reliance on subjective data such as informal feedback and/or inadequate detail of methodology detracts from the conclusions reached by the researchers.

4.4 What are the experiences of students with ASD making the transition from the primary to secondary stages?

Johnstone and Patrone (2003) explored views of transition taking account of the views of children, parents and teachers. Only two of the ten case study children were negotiating the transition from primary to secondary school and, as a consequence, there are some difficulties extrapolating from the findings. In the reported findings it is not possible to differentiate between the views of parents of children moving to secondary school and those of the other parents. However, the results are helpful to our understanding of parents' experiences of periods of transition involving changes of school. Parents referred to a number of difficulties associated with the organisational aspects of transfer. These included identification of the next school placement; negotiation with school staff regarding the timescale for transition; transport arrangements; the size of the new school; and coping with

differences in school rules. They commented on a number of strategies which had helped the transition process. In general terms, parents valued visits to the new school; the use of a home-school diary; continuity of professionals involved with their child; having teachers from the new school coming to see their child; attendance at planning meetings; having an auxiliary in place in the new school; and having a contact member of school staff. This writer would be of the view that some of these issues have a direct impact on the child or young person, whereas others have a less direct effect, perhaps through heightened parental anxiety. In the report, students with ASD in the upper primary and secondary stages reported anxieties about such aspects as the size of the school; changes to school rules; and the importance of being included in decisions about transition (Johnstone & Patrone, 2003).

In a study in one local authority in Scotland which focused on the transition of pupils with ASD from primary to secondary school, current organizational practices included transition review meetings in the final year of primary; and additional visits to the secondary school (Larney & Quigley, 2006). In an evaluative study of practice in another local authority in Scotland, parents reported delays in transition arrangements which had a negative impact on the transition process for routes involving a specialist placement. Such delays were not evident for the one case study which involved transition from mainstream primary to mainstream secondary (Douglas, 2002). In the same study, all the children knew which school they would be going to and four of the five children had visited their next school. Children's comments about

their prospective secondary school placement included such organisational aspects as the size of the school, and having many rules to learn. They suggested that adults should help prepare them for the move by taking them on visits to their new school.

Anxieties associated with academic and curricular aspects of transition have been reported by students with ASD in the upper primary and secondary stages of school (Johnstone & Patrone, 20003). These included such issues as being worried about the workload; and a desire to be treated like other students with regard to the difficulty of work set. Parents have commented on the importance of the passing on of information about their child to the next school. The sharing of information between staff was reported in one study (Larney & Quigley, 2006).

Parents have reported problems associated with the social and emotional aspects of transfer. These include coping with playtimes and lunchtimes; and uncertainty about who to turn to for help (Johnstone & Patrone, 2003). In the same study, students with ASD in the upper primary and secondary stages report anxieties around transition, including not knowing peers in the new school; and being separated from friends. In another study, students about to make the transition to secondary school reported that adults could assist by helping them make friends (Douglas, 2002).

4.5 How do the experiences of students with ASD making the transition from the primary to secondary stages compare with those of students in general?

Are there similarities and differences in the experiences of children and young people with ASD making the transition to secondary school compared to those in the general population? Students with ASD share similar concerns in organisational aspects such as differences in the size of the school and having to learn new rules. For a child or young person with ASD, the change may involve a move from a mainstream school to a specialist educational provision (Johnstone & Patrone, 2003). Depending on the type of specialist provision, this is more likely to result in the student experiencing differences in levels of adult support and supervision; the amount of potential movement around the school; the size of the school; and the number of students. In the sourced studies, there appeared to be less of an emphasis on academic and curricular aspects of the transition process in relation to children and young people with ASD. Students shared concerns about the workload in the new school. Interestingly, students with ASD were anxious not to be treated differently when they moved to secondary school. One could argue that this concern may be heightened at this developmental stage when image and status are so important. In relation to social and emotional aspects, students with ASD share similar concerns about not knowing peers in their new school; being separated from their friends (Johnstone & Patrone, 2003); and in seeing adults as having a role in facilitating social relationships (Douglas, 2002; Pietarinen, 2000).

4.6 What approaches have been advocated to facilitate the transition of students with ASD from the primary to secondary stages?

One of the sourced studies included children moving from primary to secondary schools but also considered other types of transition for children and young people with ASD (Johnstone & Patrone, 2003). Parents in this study suggested a number of ways to improve organisational aspects of transition. Although not specific to primary to secondary transfer, it could be argued that some may have general application. Suggestions included having a longer transition period; more initial contact before transition; and having one person acting as a link between parents and the school (Johnstone & Patrone, 2003). In the same study, teachers' views of transition were sought. It should be noted that these were not focused on the case study children and not specific to the primary to secondary transfer process. Teachers advocated preparatory visits; induction programmes; meeting the child; observations of the child; provision of regular routine and timetables; having a structured environment; having a keyworker to coordinate the transition process; provision of a home/school diary and other forms of communication; planning meetings; careful consideration of environmental factors; and good communication with home. A small group of students in the upper primary and secondary stages suggested improvements, including hearing about the school from other students; having contact with staff in the new placement; and early planning for transition to avoid the build up of anxiety.

Recommendations for improvements to organisational aspects of the transition process have been proposed in studies which have focused solely on transition at the primary to secondary stages. These have included structured planning; early planning for transition; transition meetings involving key stakeholders; information for parents; identification of a transition key worker; contact person in the secondary school for parents; use of personal passports; and meetings following transition to secondary school (Ennis & Manns, 2004; Larney & Quigley, 2006). In relation to direct intervention with students, it is suggested there should be consultation with pupils; extra visits to the new school; provision of a visual guide and map of the new school; provision of photographs of key staff; opportunities for designated pupil support assistants to work with the student before transfer; helping students understand the new timetable provision; clear seating plans; adult support or older peer support during the first few weeks to aid familiarity and reduce anxiety; and helping students who have organizational difficulties (Ennis & Manns, 2004; Larney & Quigley, 2006). Some writers have recognized that such approaches are applicable to children with additional support needs and not just those with ASD (Larney & Quigley, 2006).

In a study of the management of transitions of pupils with ASD, parents made very few suggestions to improve academic and curricular aspects of the transfer. One parent proposed “covering some of the work for the new placement” (Johnstone & Patrone, 2003, p. 108). In the same study, teachers advocated the sharing of information between professionals. Recommendations for improvements to academic and curricular aspects of

the transition process have been proposed in studies which have focused solely on transition at the primary to secondary stages. These have included attention to teachers' use of instructions; help with organisation in the learning context; sensitivity to any sensory processing difficulties which may impact on the student's learning; help with homework issues; sharing of information between staff in the primary and secondary schools; and providing staff with information on the students' difficulties and useful strategies (Ennis & Manns, 2004).

Parents have highlighted the importance of personal relationships to assist them during periods of transition for their child. It is important for parents to build up a relationship with professionals who are dealing with their child and to have the support of professionals through the transition process (Johnstone & Patrone, 2003). Looking at support for students, teachers have advocated the setting up of buddy systems; the use of social stories; social skills programmes to facilitate social interaction; and staff building up a relationship with the pupil (Johnstone & Patrone, 2003). Students have suggested ways to improve the transition process from a social/emotional perspective. These included knowing some pupils who would be in the same class; avoiding students who had teased them in the previous school; being treated in a more mature fashion; and being given opportunities to talk about any concerns or issues (Johnstone & Patrone, 2003).

Recommendations for improvements to social and emotional aspects of the transition process have been proposed in studies which have focused solely

on transition at the primary to secondary stages. These have included the establishment of transition support groups; consideration of informing the peer group about Asperger Syndrome; teaching social skills; and dealing with teasing and bullying 'incidents' (Ennis & Manns, 2004; Larney & Quigley, 2006).

4.7 How do the approaches advocated to facilitate the transition of students with ASD from the primary to secondary stages compare with those used with students in general?

Are there similarities and differences in the recommendations for the transition of children and young people with ASD to secondary school compared with those in the general population? There are a number of shared similarities in organisational aspects such as arranging induction visits, giving students information about their new school, meeting students in the new school and meeting staff in the new school. However, it is apparent that there is more of an emphasis on comprehensive, intensive and individualized programmes for students with ASD. This is reflected in such strategies as individualized transition planning meetings; additional induction visits; preparation of the student for the change (pictures, photographs etc.); and consideration of environmental factors from a sensory perspective. From an academic and curricular perspective, many of the general principles of sharing of information about the student and greater collaboration between staff in the two sectors are shared. Differences are detected in the level of detail of information which is passed on to teaching and other staff; the number of key stakeholders in the transition process; and preparation and ongoing support for the student in managing the new learning context.

Finally, in relation to social and emotional aspects, some of the advocated approaches to help children and young people with ASD were similar to those recommended for the general population. These were social skills programmes and buddy systems (Johnstone & Patrone, 2003; Pietarinen, 2000; Caulfield et al., 2005). Some of the recommended strategies appear to be more specific to children and young people with ASD. These included the use of social stories and informing peers about their difficulties. Parents of students with ASD value support from professionals during periods of transition (Johnstone & Patrone, 2003). This aspect of support from professionals for parents of children and young people in the general population was not considered in the sourced literature so it is not possible to reach any conclusions regarding differences.

4.8 How effective have these approaches been and how does that compare with those used with students in general?

In the papers reviewed, the effectiveness of approaches to facilitate the transition process for students with ASD has either not been considered or has been measured against the benchmarks for good transition planning for students in general (Larney & Quigley, 2006). At face value, it does seem reasonable to presume that many of the recommendations for students in the general population are applicable to students with ASD. However, there could be difficulties with this assumption. Firstly, strategies may need to be adapted to suit the specific needs of students with ASD. For example, social skills programmes may require different emphases with regard to content and

methodology. Secondly, strategies may not have been adequately evaluated regarding their effectiveness, or their impact on practice may have been variable. An example of the latter are efforts which have been made to improve the sharing of information between educators and the use that is made of that information. An example of the former is evaluation of the effect of providing students with information about their new school such as timetables and maps. Without evidence to the contrary, it does seem reasonable to apply strategies which have been recommended for the general population while advocating further research to inform practice in this area.

4.9 What theoretical perspectives have been used to aid understanding of the process of transition between the primary and secondary stages of education?

This section will consider some of theories which have been utilised by different writers and researchers to aid our understanding of the transition process for students moving between the primary and secondary stages of education. This will be followed by discussion around the utility of these theoretical perspectives for students with ASD making that transition.

4.9.1 Theoretical Perspectives

Firstly, let us consider whether a developmental perspective is helpful to our understanding of the transition process? For the purposes of this review, a developmental perspective has been adopted in that a decision was made to

include literature pertaining to school transfers occurring between the ages of ten to fourteen years inclusive. Some researchers have advocated that the transition between the primary and secondary stages of the education system is particularly difficult as it coincides with the developmental transition of adolescence (Adeyemo, 2005). Adolescence has been defined as the “period of transition between childhood, and life as an adult.....it is marked by the onset of puberty” (Smith, Cowie, & Blades, 2003). One study in New Zealand found that although organizational aspects of transition reduced in significance after what was termed the ‘initial reaction phase’, social concerns continued to play a major role during the ‘consolidation phase’ (Ward, 2000). These social concerns were seen as playing a part during the initial period of adjustment and remained as a factor which merged with “general adolescent coping behaviors” (p. 373) following the initial settling in period. Thus, Ward (2000) was of the view that it was difficult to distinguish between transition and adolescence as factors in the social adjustment of the new students.

A second theoretical perspective reflected in a number of explanations of successful and unsuccessful transitions is that of ecological systems theory. Bronfenbrenner’s ecological systems theory (as cited in Schaffer, 1996) is a well-known and influential theoretical framework which aids our understanding of the social influences on children’s development and functioning. Bronfenbrenner’s model recognizes that there are direct and indirect influences on how a child functions in a particular setting (microsystem) and that it is necessary to take account of the direct interplay

between different settings (mesosystems) and of indirect factors (exosystems and macrosystems) which are further removed from the child's direct life experiences. An example to illustrate this model would be where government economic policy (macrosystem) impacts on a parent's employment experiences (exosystem); influences family life (microsystem); and relationships between a child's home and school (mesosystem).

Taking an ecological perspective, a number of researchers have considered the interrelationship between the individual student and the school environment (microsystem). At times of transition, changes in the school environment are inevitable. Potential changes include the number of teachers in the school (Akos, 2004); the size of the school (Anderson et al, 2000; Pietarinen, 1998); and styles of learning and teaching (Anderman, as cited in Demetriou et al., 2000). Individuals vary in their ability to manage change. In considering the individual characteristics of students who have difficulty making transitions, Anderson et al. (2000) derive four interrelated factors from analysis of research, namely, gender, prior problem behaviour, low academic achievement and social-economic status/race. Environmental changes can result in discord between the students' wishes and the boundaries imposed by the environment. For example, there could be a mismatch between the adolescent's desire for greater autonomy and self-determination and the learning environment of the school (Anderman, as cited in Demetriou et al., 2000).

From an environmental perspective, Rice (as cited in Anderson et al., 2000) describes two types of 'institutional discontinuities' associated with the school transition, namely 'organizational' and 'social'. Anderson et al. (2001) propose a conceptual framework to help understand the interrelationship between individual characteristics and environmental factors. The three major concepts which make up their framework are 'transitional success or failure', 'preparedness' and 'support'. Anderson et al. (2000) transform their conceptual model into a suggested framework for facilitating successful transitions. Within the overall environmental support network, the roles of parents, peers and teachers are considered.

Thirdly, a number of researchers have postulated a role for identity and self-concept in the transition process. It has been suggested that image and status play an important role as students negotiate the transfer from primary to secondary school and that transition disrupts their views of their status within the primary and secondary school systems (Pratt & George, 2005). Academic self-concept has been found to have a predictive power in relation to school grades before and after transition to middle school, although this influence decreased following transfer (Zanobini & Carmen Usai, 2002). Competence self-concept has been found to be more influential following transition (Zanobini & Carmen Usai, 2002). Culture and peer relationships have been found to play a role in the development of social and academic identities in girls (O'Brien, 2003).

Gender is one of the categories which assumes importance in cultures alongside aspects such as ethnicity and class. Jackson and Warin (2000) consider the role of gender as a key aspect of self-concept which assumes particular importance at significant transition points in a person's life. They propose that during periods of change, key features of identity such as gender assume particular significance. Furthermore, it has been proposed that there are gender differences in the construction of identity, in that boys tend to view themselves in terms of physical constructs whereas girls consider their emotional maturity and social status (Pratt & George, 2005). The tendency to make comparisons with same sex peers increases across the transfer divide for girls but is stable for boys (Jackson & Warin, 2000). The explanation put forward for this finding was that girls respond to the challenges of the transition and the threats posed by the new environment in a self-protective fashion whereas boys respond by becoming more competitive and challenging in their behaviour.

Jackson and Warin (2000) refer to two broad theories of the 'self', namely 'humanist' and 'post-structuralist'. They adopt an approach which provides a synthesis between these theories. On the one hand, they recognize the humanist theoretical view of the self in relation to the need for continuity and consistency. On the other hand, they recognize the post-structuralist view of the self which is seen as being dynamic and responsive to a range of differing and diverse situations. Thus, they recognize that individuals may desire consistency in a world of changing experiences. They suggest that periods of transition result in "increase in the diversity and range of

experience" (p 378) and a need to make sense of these new experiences. They propose a cognitive process of categorization combined with an affective process of evaluation conducted in a social context, such that the individual is making comparisons between self and others. Motivation plays a critical role here. Comparisons are not carried out in a vacuum and the individual may draw on a range of motives, including self-enhancement, self-improvement and self-verification.

Fourthly, the process of social adaptation is a helpful theoretical concept of transition. The important role of friendships in helping children and young people negotiate the transition process, with the resultant disruption to social relationships, has been highlighted (Pratt & George, 2005). At the time of transfer to secondary school, there is an increased desire and need by both boys and girls to belong and conform to the peer group (Pratt & George, 2005). Carter et al. (2005) argue that the transition from elementary to middle school is especially difficult for students with disabilities as they are trying to adjust and adapt to changing social networks at a time when fitting in with the peer group takes on particular importance. Interestingly, they go on to suggest that students without disabilities may be less inclined to form and maintain friendships with students with disabilities at this time. Clearly, this has implications for interventions involving same age peers.

Fifthly, the role of emotional intelligence and adjustment during transition has been explored. Salovey and Mayer (as cited in Goleman, 1996) proposed a model of emotional intelligence which comprised the five domains of knowing

one's emotions, managing emotions, motivating oneself, recognizing emotions in others and handling relationships. A significant relationship between the strength of emotional intelligence and adjustment of students who have transferred to secondary school has been demonstrated (Adeyemo, 2005). Some methodological issues detract from these findings. Firstly, one of the instruments which was used to measure adjustment appears quite dated having been developed in 1977. Secondly, information about the standardization of the instruments has not been supplied to ascertain its suitability. Thirdly, it was noted that the age range of the students was quite wide (9 to 14 years). Fifthly, it is not clear whether this age range was reflected in the scores obtained i.e. whether there were any differences between younger and older students. Adeyemo (2005) proposes a number of explanations for the relationship between emotional intelligence and adjustment. He suggests that people who are high in adjustment are strong in the areas of "self-acceptance, positive relation with others, autonomy, environmental mastery, purpose in life and personal growth" (p. 87). A possible mediating role for stress is also proposed in that those students with high levels of emotional intelligence have lower levels of stress resulting in higher levels of adjustment. These explanations are at a hypothetical level.

Sixthly, some researchers have considered the role of motivation in relation to the transition from primary to secondary school. As cited previously, Zanobini and Carmen Usai (2002) investigated the relationship between self-concept, motivation and school grades as students made the transition from

primary to low middle school. Zanolini and Carmen Usai (2002) refer to the work of researchers such as Deci, working with others in 1991, and Corbière, in 1997, who have emphasized the importance of motivation in relation to performance at school. The researchers in this study used a measurement instrument which assessed three elements of motivation, namely, intrinsic motivation, extrinsic motivation and lack of motivation (termed 'amotivation'). They found that amotivation had a predictive power in relation to school grades before transition but not following transition. Intrinsic motivation was found to be influenced by academic self-concept prior to transition and following transition, although less so, which is when competence self-concept takes on a greater influence. They did not find a direct effect of intrinsic motivation on achievement as measured by final school grades.

Finally, resilience theory has contributed to our understanding of periods of transition such as changing schools. Newman and Blackburn (2002) describe resilience as a concept which "crosses national and cultural boundaries" (p.3). They cite the International Resilience Project which described resilience as "a universal capacity which allows a person, group or community to prevent, minimize or overcome the damaging effects of adversity" (p.3). Periods of transition, are, they suggest, "times of threat but also of opportunity to change" (p.8). It is interesting to positively reframe such stressors as moving schools as providing an opportunity to promote resilience. Newman and Blackburn (2002) suggest that children's services should focus more on children's strengths; on encouraging independence; encouraging problem-solving skills; and avoiding being over-protective. This

conceptualization is helpful to our understanding of the transition process for students with disabilities such as ASD and in identifying strategies to facilitate that process. In educational practice, there could be the danger of focusing too much on the student's areas of difficulty rather than strengths. This could influence not only how that student is perceived by others, but also the student's self-concept, self-esteem and efficacy. Furthermore, it is useful to look beyond individual factors to factors in the student's environment, which can act in a protective and promoting fashion. These may be found in the school (e.g. teachers, other adults, peers, and friends); in the home (e.g. parents, carers, siblings, grandparents) and in the community (e.g. adults in clubs).

4.9.2 Utility of theoretical perspectives for students with ASD

There should be recognition of the influence of the developmental processes associated with adolescence during periods of transition. Adolescence is marked by physical changes; changes in sense of self; and changes in relationships between self and others (Smith et al., 2003). Taking a social constructionist perspective, James & Prout (as cited in Smith et al., 2003), noted that adolescents are "active in the construction and determination of their own social lives" (p. 57). At times of transition, adolescents undergo a re-evaluation of themselves in relation to others (Jackson & Warin, 2000). Taking a developmental perspective may be helpful to our understanding of the transition process for a student with ASD. Similar changes occur during adolescence but there may be differences in how the young person with ASD responds and adjusts to those changes. During adolescence, there may be

greater awareness of difficulties with socialization and of ineffective attempts to make friends with same age peers. These can result in heightened levels of anxiety (Attwood, 1998). Thus, it is helpful, to consider the views and understandings of children and young people with ASD as they make the transition from primary to secondary school. Some of the studies considered in this review have contributed to that understanding but further research is required.

Related to the previous point, cognizance should be taken of the benefits of adopting an ecological systems perspective. This perspective leads to a consideration of the many direct and indirect influences on the young person with ASD; the various systemic levels and the interplay between the different levels. It is recognized that children with ASD have greater difficulty in managing change and it is reasonable to assume that they will require more help during a major transition such as changing schools. This support can be provided directly from individuals in the child's immediate environment (microsystemic level) or indirectly e.g. teaching staff liaising closely and providing support for the child's parents during the transition (mesosystemic level). It is important that any support is sensitive to the individual's needs and wishes. For example, the student may wish to be treated in a more mature fashion when they move to secondary school (Johnstone & Patrone, 2003).

During adolescence, the role played by identity and self-concept takes on increased importance. The move from primary to secondary school results in

a disruption to the teenager's sense of self and relationship with others. A young person with ASD may have been informed about their diagnosis and have to come to terms with the life long implications. However, it is known that they share similar concerns and desires about losing friends and making friends in their new school (Johnstone & Patrone, 2003). It will be important that they are provided with sensitive and appropriate levels of support as they negotiate this major change.

Related to the role of identity and self-concept is that of social adaptation. The important role of image and status within the peer group has been discussed. Peer relationships are also important for a young person with ASD but it is likely to be an area where the individual experiences greater difficulties. Although recognizing the role of peers as a key element within the student's social support network, careful consideration needs to be given to the potential role of same age peers. Given the need to re-establish their position within the peer group (Pratt & George, 2005); it may be difficult for students without disabilities to provide emotional and social support for students with disabilities (Carter et al., 2005).

Emotional intelligence was considered as a theoretical perspective although only one sourced study addressed this (Adeyemo, 2005). Looking at the five domains of emotional intelligence (Salovey and Mayer, as cited in Goleman, 1996), it is likely that an individual with ASD may well have difficulties in one or more areas. The Adeyemo study suggested that there was a relationship between emotional intelligence and adjustment to school following transfer.

This may well be an area which would benefit from further research in relation to students with ASD.

Looking at the role played by motivation, the role of academic self-concept and competence self-concept in influencing intrinsic motivation has been highlighted (Zanobini & Carmen Usai, 2002). The role of self-concept in individuals with ASD as they negotiate periods of transition would be worthy of further research.

Finally, resilience theory has relevance in considering the role of an environmental support network in promoting resilience during periods of change such as transition (Newman & Blackburn, 2000). This network would include family members (e.g. parents, carers, siblings, extended family); educators (e.g. teachers, teaching assistants) and individuals in the community (e.g. adults in clubs, peers in the community). Transition is an anxious time for these students. There appears to be value in reframing transition as providing an opportunity for growth and change. In this author's professional practice, it is not uncommon for an individual with ASD changing schools to be looking forward to making new friends and, perhaps, leaving behind those individuals who teased him or her. It is important that professionals and parents recognize this potential for change and provide the kind of environment which promotes resilience in these young people. This may be difficult and in a desire to protect our young people from harm we may inadvertently be reducing their ability to cope with the inevitable stressors in life. It is important to emphasise strengths as well as areas of

difficulty for the student with ASD making the transition to secondary school. Allied to this is the importance of promoting and encouraging skills which will promote a sense of competence and efficacy which is associated with successful transition (Zanobini & Carmen Usai, 2002; Zeedyk et al., as cited in Kapasi & Hancock, 2006). This could include promoting independence; avoiding being over-protective and encouraging problem-solving skills (Newman & Blackburn, 2000).

4.10 What are the implications for policy and practice in relation to the transition of children and young people with ASD from the primary to secondary stages?

In section 4.8, the paucity of research into the effectiveness of transition practices for students with ASD moving between the primary and secondary stages of education was highlighted. In the absence of evidence to the contrary, should policy makers and practitioners adopt strategies advocated for the general population or, indeed, for those with other disabilities? This raises the question as to whether there are unique approaches for students with disabilities. Carter et al. (2005) suggested that their proposed strategies for students with disabilities would work for all students and not just those with disabilities.

Earlier, it was suggested that there could be potential difficulties in generalizing findings from the general population to children with ASD. Firstly, strategies advocated for the general population may not have been adequately evaluated regarding their effectiveness for that population. It is

recognized that this could be due to a multiplicity of factors impacting on the translation of policy into practice. Secondly, strategies may need to be adapted to suit the specific needs of students with ASD. However, it was concluded that a sensible way forward was to utilise recommended approaches for students in the general population, or those with disabilities, while advocating further research.

Finally, findings from studies which have explored the perspectives of students with ASD and other key stakeholders will be considered in the recommendations which follow, with a similar proviso of the need for further research.

The themes of organisational aspects; academic and curricular aspects; and personal and social aspects provide a useful structure.

Organisational aspects:

1. Provision of information about the new school for the student (e.g. timetables, maps, photographs)
2. Provision of information about the new school for parents/carers
3. Meeting students from the new school
4. Meeting teachers and other staff (e.g. pupil support assistants) from the new school
5. Familiarisation visits and induction programmes
6. Conceptualising the transition period over longer timescale
7. Early planning for transition

8. Keyworker to coordinate the transition process
9. Keyworker to act as home-school ink and other forms of home-school liaison
10. Transition planning meetings involving key stakeholders (before and after transfer)
11. Consideration of environmental factors in new school (linked to sensory processing difficulties)
12. Use of personal passports
13. Help with organisational aspects during initial period following transfer from adult or older peer

Academic and curricular aspects:

1. Transfer of information about the student
2. Collaboration between teachers in the two schools regarding teaching and learning methods
3. Help with organisational aspects in learning context
4. Teachers and other adults should be aware of any sensory processing difficulties
5. Teachers and other adults should be aware of any communication difficulties
6. Support regarding homework issues

Personal and social aspects:

1. Social skills programmes

2. Establishment of social networks with same age peers in other schools and older peers in the new school
3. Peer mentoring schemes involving older peers
4. Peer mediation schemes
5. Use of social stories
6. Developing relationship with key adult(s) in new school
7. Consideration of informing peer group of student's difficulties
8. Support to address potential difficulties arising from teasing and other forms of bullying.
9. Encouraging and supporting student involvement in curricular and extra-curricular activities
10. Fostering student's independence skills
11. Look at the use of teaching assistants in schools to avoid over dependency

4.11 What are possible areas for future research?

1. Further research is required to explore the views and understandings of children and young people with ASD as they make the transition between the primary and secondary stages of education. Only three of the studies considered in this review focused exclusively on this group (Douglas, 2002; Larney & Quigley, 2006; Ennis & Manns, 2004) and one other included two case study children in this category (Johnstone & Patrone, 2003). Furthermore, three of the four studies were conducted in the Scottish context.

2. Related to point 1, would be research into developing ways of ascertaining the views of children and young people with ASD. This would need to address both methodological and ethical issues.
3. There is a need to evaluate the effectiveness of approaches advocated for the general population in relation to students with ASD. Are adaptations required to recommended approaches?
4. The role of peers in facilitating the transition of children and young people with ASD is worthy of further investigation. Students with ASD have concerns about not knowing peers in their new school and being separated from their friends (Johnstone & Patrone, 2003). Some of the approaches advocated for students with ASD are similar to those recommended for the general population. These include social skills programmes and buddy systems (Johnstone & Patrone, 2003; Pietarinen, 2000; Caulfield et al., 2005). Care needs to be taken to develop approaches which meet the needs of students with ASD. It cannot be assumed that, for example, social skills programmes for students in general will be optimal for students with ASD.
5. The role of adults in facilitating social relationships during transition has been recognized for students in general (Pietarinen, 2000) and for students with ASD (Douglas, 2002). Students about to make the transition to secondary school report that adults could assist by helping them make friends (Douglas, 2002). In another study, students said they would value being given opportunities to talk about any concerns or issues they might have (Johnstone & Patrone, 2003). Although not explicitly stated, it is reasonable to assume that this

would include adults in a supportive role. Further research into the most effective means of supporting students with ASD during transition from primary to secondary is required.

6. Further research is needed into possible gender differences in students with ASD as they negotiate the transition from primary to secondary school. These could consider such aspects as identity, status, the role of peers and levels of anxiety.

4.12 Limitations of review

It is recognized that this literature review has a number of limitations. Firstly, in relation to the general literature on transition, it was not feasible to source hard or electronic copies of all the papers. Those critiqued could be considered to be a reasonable although not comprehensive representation of the literature in this field. Secondly, with regard to the literature on ASD and transition, few studies were found and these were restricted to the UK context. Thirdly, the section on theoretical stances provides an overview which is helpful to our understanding of transition rather than an in-depth exposition.

5 Conclusion

This review set out to answer a number of questions pertaining to the transition of students between the primary and secondary stages of education. These covered such aspects as the perceptions and experiences of students; approaches which have been advocated to facilitate the transition process; and the effectiveness of these approaches. Within this context, there was a specific focus on the transition of students with ASD.

The report outlined the methodology used in the literature search, including definitions of key concepts and parameters of the search criteria. Three broad themes had emerged from reading the literature. These were physical and organizational aspects; academic and curricular aspects; and personal and social aspects. This conceptual categorization was used to structure the general literature on transition. Four studies that focused exclusively on the transition of students with ASD were considered and critiqued in some depth.

The discussion section of the report revisited the questions posed in the introduction. Findings from studies were evaluated using the research questions. This section included a brief overview of a number of theoretical perspectives which emerged from reading the literature. A critical evaluation followed of the utility of these perspectives in helping our understanding of the process of transition for students with ASD.

In considering the implications for educational policy and practice, the question as to whether there are unique approaches for students with ASD is posed. On balance, it was concluded that recommendations should be based on the best available evidence. It was acknowledged that there are a number of areas meriting further research, some of which are proposed. Finally, some of the limitations of the review are considered.

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**Transition Programme for Young People with Autism
Spectrum Disorder Moving from Primary to
Secondary School: Development, Implementation and
Evaluation**

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Abstract 2

Transition Programme for Young People with Autism Spectrum Disorder Moving from Primary to Secondary School: Development, Implementation and Evaluation

Elizabeth Fraser Selkirk Hannah

This report describes an evaluation of a primary-secondary transition programme for nine students with autism spectrum disorder (ASD) all in their final year at mainstream primary schools. A range of data collection methods and sources were employed in the evaluation of process and outcome components. A pre-post research design assessed the impact of the programme in relation to outcome variables. As part of a needs analysis, student preparation was seen as important by teachers, parents and students. Students gave a positive evaluation of the programme. The researcher noted that the students engaged well with programme activities, however, there was no evidence of a positive relationship between the researcher's ratings of student engagement and the students' ratings of the helpfulness of different elements of the programme. Comparing pre-post questionnaire data, students had more information about secondary school; their understanding of expected behaviour had improved, although not statistically significant; there were positive changes in students' understanding of ASD, with parental ratings reaching statistical significance; there were significant differences in teachers' and parents' ratings of some social skills; and there was no evidence of significant differences in students' ratings of social skills. A number of limitations of the research are discussed. Finally, implications for practice and possible areas for future research are proposed.

Keywords: autism spectrum disorder; transition; primary school; secondary school; transition programme

1 Introduction

1.1 Background to study

The impetus for this study derived from the author's research interests in inclusion, educational transitions and the education of students with autism spectrum disorder (ASD). As a senior educational psychologist working for a large inner city authority, there had been opportunities to be involved in the development of educational policy and practice in relation to the education of children and young people with ASD. At authority and establishment levels, this had included membership of a multi-agency and multi-disciplinary ASD policy framework group and various sub-groups; the development and implementation of area support and development groups for teachers, pupil support assistants and child development officers in primary schools and nursery establishments; and contribution to authority training initiatives. At child and family levels, the author's specialist remit encompassed direct service delivery to children and young people affected by ASD. Knowledge and experience gained from direct working and systemic working practices in the area of ASD informed the direction of the research.

1.2 Transition from primary to secondary school

For all students, the transition from the primary to the secondary stages of formal education is accompanied by many changes. Typically, it is associated with the move from a small primary school to a large secondary school with concomitant changes in the physical, social and learning

environment. In a recent review of research on the transition of students from primary to secondary school, this writer identified three broad themes which proved helpful in conceptualizing different aspects of the process (Hannah, 2006). These were physical and organisational, academic and curricular, and personal and social aspects.

In making the transition to secondary school, students have to negotiate changes in the physical and organisational environment. Some of the differences between primary and secondary schools, such as the breadth of subjects, are viewed positively by students (Tobbell, 2003). Other features, such as the size and layout of the school, tend to be viewed negatively but this is usually a short-lived perspective as students become familiar with their new environment (Akos & Galassi, as cited in Akos, 2004; Ward, 2000). However, some concerns continue, such as dealing with the number and range of teachers (Tobbell, 2003); differences in teaching style and management approaches (Johnstone, 2001); students' organisational skills (Johnstone, 2001); and worries about social aspects (Ward, 2000).

The move to secondary school involves changes to the learning environment and the nature of learning experiences. Students look forward to, and, following the transition, report satisfaction with the breadth and variety of subjects in secondary school (Graham & Hill, 2003; Besley, 2004). They enjoy the opportunities for more movement (Pointon, 2000). In contrast, students express concerns about the level and amount of work and homework (Graham & Hill, 2003); the sense of loss of ownership of personal

space (Pointon, 2000); and the shift from collaborative to individualised forms of learning (Tobbell, 2003). There is a well established literature on the impact of school transfer on students' progress. There is evidence of a 'hiatus' in progress whereby the trend is for pupils' attainments to 'dip' or 'stand still' following transfer (Galton, Gray, & Ruddock, 1999; Suffolk LEA, as cited in Galton et al., 1999; Galton, Hargreaves, Comber, & Wall, as cited in Galton et al., 1999). Interestingly, a positive relationship has been found between students' adjustment to secondary school and their academic progress (Nisbet & Entwistle, as cited in Galton et al., 1999). Contributory factors to students' adjustment in secondary school appear to include self-esteem (Demetriou, Goalen, & Ruddock, 2000; Galton, Hargreaves, Comber, & Wall as cited in Galton et al., 1999), feelings of competence (Zanobini & Carmen Usai, 2002), and levels of 'achievement motivation' (Zanobini & Carmen Usai, 2002).

Transition involves significant changes to the students' social network (both adults and peers). Students look forward to making new friends (Graham & Hill, 2003). In contrast, students express concerns about leaving the stability of peer relationships formed in the primary school to the insecurity of forming new social groups in the high school (Graham & Hill, 2003; Johnstone, 2001). Peers are seen as playing a key role in helping students negotiate the transition to secondary school (Pietarinen, 1998; Pietarinen, 2000; Pratt & George, 2005; Caulfield, Hill, & Shelton, 2005; Kvalsund, 2000). Teachers are also seen as having a significant role in facilitating social relationships (Pietarinen, 2000). The anticipated move to secondary school can lead to

heightened feelings of anxiety and levels of stress (Pratt & George, 2005) which some writers have construed as fulfilling an adaptive function (Lucey & Reay, 2000). There is evidence that the decrease in anxiety levels following transfer to a new school is akin to that found following year on year transfer (Lohaus, Ev Elben, Ball, & Klein-Hessling, 2004). Interestingly, this study found a number of students who didn't experience such a reduction in anxiety levels, suggesting individual differences in the ability to adapt to change.

1.3 Transition of students with ASD

Students with autism spectrum disorder (ASD) face additional “barriers to their learning and development” (Scottish Executive, 2005, p. 50). The term ‘triad of impairments’ (Wing, 1992) is now in common usage to describe difficulties in the three areas of “social interaction, social communication and imagination” (Wing, 1992, p. 5). ASD is a lifelong developmental disorder and, as such, its presentation will be influenced by a range of factors, including age, cognitive abilities, individual personality and the presence of other disorders (PHIS, 2001; Wing, 1992); and will change over time, especially for those with higher cognitive abilities (PHIS, 2001). These difficulties will impact on all aspects of a young person's functioning especially at transition stages such as the move to secondary school.

Similarities and differences in the transition experiences of students with ASD and those of students in general have been considered (Hannah, 2006). Students with ASD share similar concerns about organisational aspects, such as school size and learning new rules (Johnstone & Patrone, 2003).

There was some evidence of unique concerns with regard to lack of consultation about decisions during the transition process and, for those affected, changes associated with moving to a highly specialised educational provision (Johnstone & Patrone, 2003). Students with ASD share the concerns of the general student population about the workload in secondary school. With regard to personal and social aspects of the transition process, students with ASD have similar concerns about not knowing peers (Johnstone & Patrone, 2003); being separated from their friends (Johnstone & Patrone, 2003) and in seeing adults having a facilitation role in social relationships (Douglas, 2002).

Comparative analysis of strategies used to facilitate the transition of students with ASD with students in the general population found that there was a large degree of similarity in methods (Hannah, 2006). Where there were differences, these tended to be reflected in more comprehensive, intensive and individualised programmes, such as additional induction visits, transition planning meetings and the level of detail in information exchanged between school staff. However, there were some strategies which were specific to students with ASD, such as the use of social stories (Hannah, 2006).

1.4 Gaps in knowledge and understanding

The paucity of published research into the effectiveness of transition practices for students with ASD was highlighted (Hannah, 2006). Articulated areas for future research included three pertinent to this study. Firstly, there should be further exploration of the perspectives of students with ASD as

they negotiate the transition from primary to secondary school. Secondly, there is a need for further evaluation of approaches advocated for the general population which have been applied to students with ASD. For example, it will be important to ascertain the form that social skills programmes should take and whether they should be customized for students with ASD. Thirdly, the importance of peers during the period of transition has been identified for students in general and students with ASD. For students with ASD, it would be helpful to gain a better understanding of the nature of support offered by peers and how that operates to facilitate the transition to secondary school.

1.5 Aims and research questions

The focus of this study was the transition of students with autism spectrum disorder (ASD) moving from primary to secondary school. The overall aims of the research were to:

- Develop and implement a programme designed to facilitate the transition of students with ASD moving from primary to secondary school.
- Evaluate a programme designed to facilitate the transition of students with ASD moving from primary to secondary school.

The study specifically set out to answer the following questions:

1. What are key stakeholders' views of factors which would help students in the transition from primary to secondary school?

2. What are the participating students' perceptions of the transition programme?
3. What is the researcher's perception of the development and implementation of the transition programme?
4. Does participation in the transition programme result in changes in the students' knowledge and understanding about secondary school?
5. Does participation in the transition programme result in changes in the students' awareness and understanding of autism spectrum disorder?
6. Does participation in the transition programme result in changes in the social interaction, social reasoning, social communication and friendship skills of the students?

The first three questions focus on process aspects of the development and implementation of the programme whereas the final three questions evaluate the impact of the programme in relation to a range of outcomes.

This report will consider the development and implementation of the transition programme during the academic session 2004-2005 and the first phase of the evaluation. There will be two further reports. One will focus on the second phase of the evaluation, which comprised a follow-up investigation of the participating students' progress during their first year at secondary school; perspectives of the move from primary to secondary school and the helpfulness of the transition programme. The other report will consider the transition experiences of a sample of participating students using a multiple case study approach.

2 Methodology

2.1 Research design

2.1.1 Nature of research

This research could be construed as falling within the parameters of evaluation research. Robson (2002) describes a number of features and facets of evaluation research. Typically there is an action focus to evaluation research. In this study, the aim was to implement a programme which would make a positive difference to the lives of the participating students. Robson (2002) states that “evaluation is a study which has a distinctive purpose; it is not a new or different research strategy” (p.202). He further comments that “the purpose of an evaluation is to assess the effects and effectiveness of something, typically some innovation, intervention, policy, practice or service” (Robson, 2002, p.202). This resonates with the aims of this research.

In relation to the fixed/flexible research dimension, this study has elements of both. It incorporated a degree of flexibility with regard to the design and implementation of the programme, by taking account of the views of key stakeholders. The fixed dimension of the research can be seen in the outcome variables which were preset before the programme was implemented. A pre- post design was utilised such that the outcome variables were measured immediately before and after implementation of the programme.

2.1.2 Context of the study

The study took place in a large inner city in Scotland. The city faces challenges due to the levels of deprivation within its locality. It includes more than half of the 5% most deprived areas (data zones) and just over a third of the 15% most deprived areas in Scotland (Scottish Executive, 2006). Approximately 82, 000 children and young people are catered for in council run provision and additional services are purchased from the voluntary and independent sectors (Council X, 2006). The authority is committed to the promotion of inclusion for children and young people with additional support needs, in line with national policy and legislation (Standards in Scotland's Schools etc. Act 2000). This is addressed through a range of initiatives and services designed to develop and assist the education of students with additional support needs in mainstream schools. Furthermore, there are a number of units located within mainstream schools which offer opportunities for integration within the host school. These include units for students with ASD at the primary and secondary school stages.

One of the secondary autism units was established with a remit to provide outreach to secondary schools located in the south side of the city. The principal teacher with management responsibility for this unit was keen to develop this service. The development and implementation of a transition programme for students with ASD moving from primary to secondary school aligned with this remit.

2.1.3 Sampling methodology

Non-probability sampling methods were used to select the location for the programme and the participating students. It is recognized that this sampling method limits the statistical basis on which findings may be generalized to the population (Robson, 2002). However, it was considered suitable for this study as there was no intention to generalize beyond the sample. Nevertheless, it is possible to draw conclusions which may have relevance to the population (Robson, 2002).

Purposive sampling was used to select the location for the implementation of the programme. Cohen, Manion and Morrison (2000) state that “researchers handpick the cases to be included in the sample on the basis of their judgement of their typicality” (p. 103). The criteria were a central geographical location; availability of staff from the autism unit who could provide support; and location within a mainstream secondary school. Only one site met these criteria.

Students were selected using purposive sampling methodology. The population was all primary seven students in mainstream primary schools in the south side of the city, who could transfer to mainstream secondary schools in the city. The sampling frame was drawn up using the knowledge of educational psychologists from two areas in the south side of the city. One of the drawbacks of this method was its reliance on full and accurate returns. For example, staffing changes in educational psychology services could have resulted in omission of names of potential candidates. Other sources of

information, such as speech and language therapy records, provided a cross-checking mechanism. The inclusion criteria were that the students should have a diagnosis of ASD; be in the final year of education in a mainstream primary school; and anticipate transfer to a mainstream secondary school (Appendix 4). It was intended that the sample of students offered a place on the programme should be more or less equivalent to the entire population, given the limitations of the sampling frame. Section 2.2.1.4 provides further detail of the method of identification of participants.

2.2 Phases of the research

2.2.1 Development phase

The development phase of the project covered the period from November 2004 to May 2005 (Appendix 1). The initial idea for a transition programme was mooted in November 2004 during a meeting involving the author and the principal teacher (PT) of an autism unit (AU).

2.2.1.1 Permissions for the research

Permission to conduct the research was sought from the author's immediate line manager, an area principal psychologist (APP). The research was considered relevant to the author's work remit and was in line with Council X education services priorities and objectives as outlined in the service plan for 2004-2007 (Council X, 2004). In particular, there was a stated need to "ensure effective multi-agency and intra-service assessment and planned provision to address the increasing incidence of autism" (Council X, 2004, p.35). The research proposal was discussed with a principal officer (PO) in

education services and thereafter with the head of service (additional support needs (ASN)) in the authority. At a local level, it was necessary to obtain permission from the head teacher (HT) of the secondary school, within which the autism unit was located, and which would host the transition programme sessions.

Involvement of other services was considered both desirable and valuable. Obtaining the relevant permissions for the involvement of a speech and language therapist (SALT) proved a rather convoluted exercise involving communication with personnel at different management levels within speech and language therapy services. Two occupational therapists (OTs) agreed to contribute to one of the planned sessions on the basis that they had had prior involvement with some of the students, thus complying with their normal protocols for case management and responsibility.

2.2.1.2 Developing the programme team and clarifying roles

Delays in obtaining permission for speech and language therapy services involvement until late March impacted on the SALT's participation in the development and planning phases. The SALT linked to the autism unit had indicated her interest and willingness to be involved and had been kept apprised of developments during the early planning phase. She was able to attend the information session for parents and students held in late March 2005.

The first planning meeting involving the SALT did not occur until late April 2005. In relation to respective roles, it was agreed that the PT (AU) would assume the lead role in facilitating sessions during the implementation phase supported by the SALT. The PT (AU) had a key role alongside the author in the overall coordination and planning of the programme. It was the author's responsibility to design and conduct the programme evaluation. A non-participant observer stance was adopted, enabling a more reliable and objective evaluation of the process. If the researcher had fully participated in the sessions important information could have been missed.

2.2.1.3 Development of the programme

The author and the PT (AU) researched and sourced a range of materials designed to facilitate the students' knowledge and understanding of secondary school life; develop their skills in relation to social interaction, social reasoning, social communication and friendship; and their understanding of the nature of Asperger Syndrome. Some of the materials were developed for use with children and young people with ASD whereas others were more generic in their target audience (Appendix 2). The materials had not been designed specifically to address the needs of young people making the transition to secondary school. Selection of materials was based on face validity in relation to the goals of the transition programme.

A transition workbook developed by the Outreach Support Service for Mainstream Education (OSSME) in the Greater Merseyside Region of the UK

was sourced (OSSME,2003a). This workbook was one component of an Autistic Spectrum Disorder Transition Toolkit (Att) developed by OSSME in collaboration with six local education authorities (LEAs) and with sponsorship from Greater Merseyside SEN Partnership and the Department for Education and Skills (DfES) (OSSME, 2003b). It comprises a series of worksheets designed to address particular difficulties which may be experienced by students with ASD making the transition to secondary school. Permission was gained from the authors to utilize the transition workbook for this study, including minor adaptations of the content to suit the Scottish context. The source of the materials was acknowledged. Extracts from the workbook may be found in Appendix 3. The original workbook can be sourced and, if desired, downloaded from the website (OSSME, 2003 a). An independent evaluation of the Att by Liverpool John Moores University was scheduled for completion in May 2005 but was not available prior to commencement of the programme. The decision to utilise the materials was based on their face validity in relation to the goals of the transition programme.

2.2.1.4 Identification of participants

To gauge the number of potential candidates for the transition programme, the author conducted an initial trawl using information supplied by educational psychologists (EPs) in one quadrant of the city. It was assumed that potential participants would be known to psychological services. The result of this exercise indicated that there would be sufficient numbers to make it a viable project. Following further consultation with the PT (AU), it was decided to extend the programme to another quadrant of the city. One

rationale for this decision was that the AU offered an outreach service to secondary schools in the area covered by both quadrants. A memorandum was sent to all educational psychologists in the author's area and the adjacent area via the area principal psychologist (Appendix 4). Information was sought in a fashion which would maintain confidentiality. This exercise resulted in twelve potential participants being identified. Of these, two students did not meet the criteria. One student appeared to have a specific language impairment rather than ASD and the other student was on the waiting list for diagnostic assessment.

Following permission from the head of service (ASN), further information was sent to all educational psychologists who had identified potential participants with a request to obtain parental permission. Nine of the ten parents/carers accepted the offer of a place on the transition programme. Another potential participant was identified at a later stage and was offered a place but his parent was of the view that adequate supports were in place and declined the offer.

All nine students were male and in their final year of education in a mainstream primary school. Ages at commencement of the programme ranged from 11years 3 months to 12years 4 months (mean = 11 years 8.9 months; standard deviation = 4.6 months). All students had a diagnosis of Asperger Syndrome. One of the students had an additional diagnosis of Tourette Syndrome.

2.2.1.5 Consultation process

In late March 2005, all parents/carers and students were invited to an information session in the unit led by the author, PT (AU) and unit SALT (Appendix 5). Ten parents and eight students attended.

The first part of the session constituted a joint presentation to the parents and students. Information leaflets were distributed (Appendices 6&7). The group was then split. Parents were asked to complete a consent form (Appendix 8) and questionnaire (Appendix 9). Development of this questionnaire is outlined in section 2.2.3.3.

Question 7 of the questionnaire was designed to elicit parental views which would inform the development of the programme content. It stated: "In your opinion what are the three things that would most help your child with the transfer between primary and secondary education?" The responses to this question were subject to a content analysis (Robson, 2002). The posed question formed the starting point for the analysis. It was decided to use meaningful phrases as the recording unit. Categories were generated in an inductive fashion ensuring that all meaningful phrases were allocated to categories in a mutually exclusive fashion. A similar procedure was undertaken by an educational psychologist not involved in the research. The coding system was then revised; further analyses conducted by both parties; and inter-rater reliability calculated using Cohen's Kappa (K). It was decided to utilise categories generated from analyses of parents', teachers' and students' comments to facilitate comparison of responses to the question.

Nine categories were identified. The index of concordance was 82% and Cohen's Kappa (K) was 0.82 which is considered 'excellent' (Fliess, as cited in Robson, 2002, p.342). Any minor anomalies were addressed resulting in an agreed final analysis. The results of this analysis can be found in section 3.1.1. This information was shared with the principal teacher (AU) and the unit SALT at a planning meeting.

Students participated in a few icebreaker activities, facilitated by the principal teacher (AU) and unit SALT. Afterwards, the author joined the student group; distributed consent forms (Appendix 10) and answered pertinent questions. One student agreed to participate in the group work sessions but did not give his consent to the video recording (although this was obtained at a later juncture). All other students gave their consent.

All the students completed a transition questionnaire at the beginning of the first session of the programme. This incorporated a question designed to elicit their views of the transition process (Appendix 11). Although the provisional content of the programme had been devised at this juncture, it would have been possible to make some alterations to the content of subsequent sessions. Question 7 stated: "What three things would most help you with the move from primary to secondary school?" The responses to this question were subject to the same analytical process as that used with parental responses. In this case, the index of concordance was 88% and Cohen's Kappa (K) was 0.88 which is considered 'excellent' (Fliess, as cited in Robson, 2002, p.342). Any minor anomalies were addressed resulting in

an agreed final analysis. The results can be found in section 3.1.3. It should be noted that the full content analysis was not completed until after the transition programme had commenced, however, a preliminary analysis proved helpful during the implementation phase.

A follow up letter was sent to the parent of the ninth student, who was unable to attend, enclosing a parent questionnaire, information sheets and consent forms. These were duly completed and returned. The student who had refused to be video recorded eventually gave his consent. Consent was obtained following the first session during which care was taken to keep his image outwith the range of the camera.

Head teachers of the participating students' schools were provided with information about the proposed programme by letter (Appendix 12) with an enclosed copy of the information leaflet (Appendix 6). Permission was sought for the students to be released from school to participate in the sessions. Although the authority had given permission for the programme to proceed and agreed to cover transport costs, there was no financial provision for escorts. The head teachers of the respective primary schools were invited to offer the services of a pupil support assistant or other member of staff to act in this capacity. Furthermore, the head of service (ASN) had been keen that the programme would provide a staff development opportunity for staff in the primary schools and receiving secondary schools. This element was not subject to formal evaluation as it was considered outwith the planned scope of the research.

At a later juncture, informed consent was sought from the participating students' class teachers in relation to the completion of a questionnaire (Appendices 14&15). Development of this questionnaire is outlined in section 2.2.3.3. Access to class teachers was arranged via the head teacher in each of the respective primary schools (Appendix 13). All but one of the completed questionnaires was received before the first session of the programme. These were subject to an initial informal analysis. The final questionnaire was received between sessions one and two.

Question 7 of the questionnaire was designed to elicit class teachers' views which would inform the development of the programme content. It stated: "In your opinion what are the three things that would most help your student with the transfer between primary and secondary education?" The responses to this question were subject to the same analytical process as that used with parental and student responses. The index of concordance was 88% and Cohen's Kappa (K) was 0.88 which is considered 'excellent' (Fliess, as cited in Robson, 2002, p.342). Any minor anomalies were addressed resulting in an agreed final analysis. The results can be found in section 3.1.2. It should be noted that the full content analysis was not completed until after the transition programme had commenced, however, a preliminary analysis proved helpful in the planning phase.

An information session for staff from the receiving secondary schools was organized for the beginning of May 2005. Head teachers of the prospective

secondary schools were invited to send representatives from support for learning and pastoral care staff (Appendix 16). Six staff members from four secondary schools attended the session. The rationale for the programme was explained and a draft programme outlining the content of the sessions was distributed. Suggested minor amendments to the Arfur Moe transitions booklet (OSSME, 2003a) were adopted. Staff provided copies of homework diaries, school maps and sample first year timetables which would be utilised during the sessions. In addition, they were asked to furnish photographs of significant people and areas within the school premises. The staff present at this meeting expressed a desire to obtain information about the students as this would inform planning to meet the students' needs in secondary school. The author indicated that this had been planned and relevant permissions had been obtained from the parents of the participating students. Students' permissions were obtained prior to the information being passed on.

2.2.2 Implementation phase

2.2.2.1 Structure and content of the programme

Six sessions took place over the period from 10th May 2005 to 14th June 2005 with each session lasting two hours. A typical session would commence with introductory activities and discussion. There would be two skills components punctuated by a social break. The final component would comprise a review of the session, looking forward to the next session and distribution of home task and parent feedback sheets. Details of the programme are outlined in Appendix 17.

2.2.2.2 Delivery of the programme

All sessions took place in classrooms located in the autism unit, which is sited within a secondary school in the south side of the city.

The principal teacher (AU) was the main facilitator during the sessions. The relaxation activities were led by the unit speech and language therapist and for this purpose the group was divided into two sub-groups. The SALT was able to attend three of the sessions. In session five, two occupational therapists (OTs) provided an input entitled “Looking at our senses” for which the group was sub-divided into two. Members of staff from the AU (class teachers and pupil support assistants) provided additional support in all six sessions. Members of staff from the primary and secondary schools observed some of the sessions but did not take an active role. The researcher was present at all the sessions in a non-participant observer role.

There was a good level of student attendance at the sessions. Five participants attended all six sessions and four attended five sessions. Reasons for non-attendance were holiday commitments (one); visits to secondary schools (two); and unknown (one).

Home tasks were prepared by the author. The purpose of these tasks was to provide consolidation of some of the activities and increase parental involvement. There were home tasks linked to five of the sessions. An example of a home task can be found in Appendix 18.

Feedback sheets which had been prepared by the author provided opportunities for comments by group members, parents and students. They were designed to provide a means of two way communication between the programme team and parents regarding each student's progress; encourage discussion between participating students and their parents; and give the students an outlet to express their views. From a practical perspective, it was decided that the author would supply comments about students on behalf of the programme team. These comments were based on contemporaneous notes of the behaviour of the students during each session (see section 2.2.3.2). This writer made notes in all six sessions. The SALT was able to furnish notes based on her observations of students' behaviour in the role of participating observer. She was present at three of the six sessions.

2.2.2.3 Transfer of information to secondary school staff

To facilitate the transition process, programme staff had planned to provide information to secondary school staff on individual students. This information was supplied by programme staff, class teachers, parents and students based on elicited responses to a question in the post-transition questionnaire.

There were three parallel versions of this question:

(a) Class teacher and programme staff version

Write down the three things that you would most want staff in the secondary school to know about your student. Examples could include your student's

interests, things he/she is good at, things that would help him/her learn in school and things that would help him/her make friends.

(b) Parent version

Write down the three things that you would most want staff in the secondary school to know about your child. Examples could include your child's interests, things he/she is good at, things that would help him/her learn in school and things that would help him/her make friends.

(c) Student version

Write down three things that you would like teachers in your new school to know about you. Examples could include your interests, things that you are good at, things that would help you learn in school and things that would help you make friends.

The information was collated and sent to the head teachers of the receiving secondary schools (Appendix 20).

2.2.3 Evaluation of the programme

The evaluation of the programme incorporated both process and outcome components.

Evaluation of process aspects utilised a number of data sources. Firstly, students completed a transition programme evaluation questionnaire which asked them to rate different elements of the programme. Secondly, the researcher made contemporaneous notes of the behavioural responses of

the student participants; and notes were kept of the operation of the activities in each session. Thirdly, feedback comments were provided by the researcher, the students and parents. Finally, all of the sessions were video recorded. The first two data sources will be utilised in this report.

Data from the transition programme evaluation questionnaire relate to research question 2. With regard to research question 3, the focus was the researcher's subjective view of the operation of the sessions. Analyses of the researcher's comments in the 'content and evaluation of sessions' and the 'observation of participants' forms were undertaken (see section 2.2.3.2). A separate report, which will take the form of a multiple case study, will utilise data from observation notes, feedback sheet comments and video recordings of the sessions.

In relation to outcome components, the aim was to evaluate the impact of the programme in relation to pre-identified areas. These relate to research questions 4, 5 and 6 in section 1.5 of this report. Parallel versions of the parent, student and teacher transition questionnaires were used for pre-post programme comparison.

2.2.3.1 Transition programme evaluation questionnaire

The transition programme evaluation questionnaire (Appendix 19) was designed to provide a retrospective assessment of different components of the programme from the students' perspective. The design and content of questions 1 to 4 was based on the Arfur Moe transition workbook evaluation

(OSSME, 2003a). All of the questions were closed (apart from a final catch-all question “do you want to add anything else?”). The first three questions were of the fixed yes/no response type. Question 4 comprised twelve four-point rating scale items presented in tabular format. 1 was ‘didn’t help me; 2 was ‘quite helpful’ and 3 was ‘very helpful’. A final ‘not sure’ category was added. Questions 5 to 13 focused on other elements of the programme. They utilised the same four-point rating scale.

The questionnaire was completed by the students in the latter half of the final session of the programme. Adults were able to provide assistance, if required, with reading and understanding of the questions.

Data was mainly quantitative in nature. Descriptive statistical analysis was undertaken using SPSS. The results are summarized in section 3.2.

2.2.3.2 Observation of programme sessions

The study incorporated direct observation of the sessions. Observation can be used as a “supplementary method to collect data that may complement or set in perspective data obtained by other means” (Robson, 2002, p.312). In this evaluation research, observation data were used to supplement questionnaire data and allow for exploration of the operation of the programme from the students’ and the researcher’s perspectives.

Robson (2002) refers to two main dimensions in his classification of observational methods. The first concerns the formality and structure

imposed on the observation. In this research, an informal approach was adopted. The envisaged advantage of this approach was that it would capture the complexity of the events and, in the case of the videotape data, would provide a more complete account of the situation. The second dimension relates to the extent of observer participation in the situation. This can range from complete immersion to what he refers to as “the ‘pure’ observer, seeking to be an unnoticed part of the wallpaper” (Robson, 2002, p.313). It was decided to adopt, as far as possible, a non-participative role. It was envisaged that this would enable full attention to be focused on observation of the operation of the sessions and the participants’ responses during different activities. Given that the researcher’s role was known to the participants, it is questionable whether you could consider this as non-participative in the purist sense. Furthermore, the researcher did provide comments for the feedback sheets thus participating in the operation of the programme.

It was decided to videotape all the sessions using camcorders mounted on tripods. The envisaged advantage of this method compared to sole reliance on field notes was that it would provide not only a permanent record but one that was not subject to potential observer bias and recording inaccuracies. In addition, it would provide both auditory and visual data, capturing the complexities of social interactions in a classroom context. Some of the disadvantages of using this technique were recognized, including its lack of flexibility compared with a human observer (Simpson & Tuson, 1995). For example, the students could block the camera or key events could be missed

if they were outwith the range of the camera. In an attempt to circumvent this problem, two cameras were employed for large group activities. At times it was necessary to have a camera in each room, for example, when the group was split for different activities. It was recognized that the presence of a camera could create an artificial atmosphere. To counter this argument, it was noted that after the initial novelty, the students came to accept the presence of the camera(s).

In addition to the utilization of video recordings for later analysis, immediate field notes proved helpful in providing an easily accessible record of events. Field notes were adopted as a recording method with two main purposes. Firstly, they would provide a source of information for the feedback comments completed at the end of each session. Secondly, they would inform the evaluative and forward planning discussions of the programme team at the end of each session. To this end, the author made brief notes of the operation of the activities in the six sessions using a prepared sheet (Appendix 21). This writer recognizes that one of the disadvantages of this method is its subjective nature. However, one of the advantages is its flexibility thus avoiding the potential difficulties associated with pre-set categories. In addition, both the author and the SALT made brief comments on the observable behaviour of the student participants (six and three sessions respectively) using a prepared sheet (Appendix 22). However, for the purposes of this report, only the notes made by the author will be subject to analysis. The reasons for this decision were that the SALT's notes were not available for all the sessions; and that, in relation to research question

two, the focus was on the researcher's perception of the implementation of the programme.

In analyzing the observation data, general comments about the operation of the activities and notes about the responses of individual participants were collated. This resulted in descriptive information about the nature of the activity and the level of student engagement (Appendix 23). Based on a number of readings of the data, the author generated a three-point rating scale designed to gauge the level of student engagement in each activity. A dictionary definition of "engage" is "to involve somebody in an activity, or become involved or take part in an activity" (Bloomsbury, 2001, p. 474). The term "engagement" is utilised in this analysis to encapsulate the level of attention and interest displayed by the students. The rating scale employed was:

1 = low (most of the students disengaged)

2= medium (approximately half of the students engaged)

3= high (most of the students engaged)

The results of the analysis are summarized in section 3.3.

2.2.3.3 Transition programme questionnaire

The decision to utilise questionnaire methodology to capture parents', students' and teachers' views was based mainly on time constraints. Given the timescale for the research, it would not have been possible to conduct in-depth interviews with all participants prior to commencement of the programme. The use of parallel versions of the parent, teacher and student

questionnaire was designed to allow comparison across the three groups and provided triangulation using different data sources (Robson, 2002).

Pilot versions of the parent, student and teacher transition questionnaire were developed. The parents of two first year students in the autism unit were asked to complete the pilot version of the questionnaire and provide feedback. Following this consultation process, minor amendments were made to the layout of the table in question 6 (Appendix 9). Two first year pupils who attended the secondary autism unit were asked to complete the pilot version of the student questionnaire. In response to feedback comments, changes were made to the wording of questions 1 and 5; one of the items in question 6; and the end points of the two 6-point scale items in question 4 were altered to make 'strongly agree' point 1 in both (Appendix 11). The pilot version of the teacher questionnaire was very similar in content and format to the parent version. The principal teacher of the secondary autism unit asked two members of staff in the unit to review the questionnaire. Following this process, the only required amendment was to the layout of the table in question 6 (Appendix 15).

The items in question 6 were designed to assess the students' skills in social interaction, social reasoning, social communication and friendship. In the student questionnaire, these were referred to as 'social skills'. The aim was to develop a measurement instrument which would focus on specific behavioural skills and allow a pre-post programme comparison of observable social skills. Ideally the instrument would have three parallel versions,

namely student, parent and teacher. In addition, it would be suitable for use with students with ASD.

A number of potential measurement instruments were reviewed. The social skills questionnaires developed by Spence (1995) appeared to meet some of these criteria. Firstly, they were designed to measure “specific behavioural responses” resulting in “positive outcomes from social interaction” (Spence, 1995, p.1). Secondly, there were parallel parent, teacher and pupil versions. However, there was no research evidence as to the sensitivity of these instruments in detecting changes over a short period. This was important given that the six sessions of the programme were over a five-week time period. Spence (1995) acknowledges that information on the test-retest reliability of the instruments was not available at the time of their development and commented on the need to ascertain their sensitivity “to change following training or intervention programmes”. Another factor was the suitability of the instruments for students with Asperger Syndrome. This was an unknown element. Spence (1995) recognizes this aspect noting the value in obtaining information about the sensitivity of the questionnaires in “demonstrating differences in scores across groups of youngsters” (Spence, 1995, p.12).

After careful consideration of all these aspects, it was decided to produce an instrument which would incorporate skills applicable to young people with Asperger Syndrome and which would, hopefully, be sensitive to changes over a short time period. It should be noted that it was decided to utilise an

adapted version of the social skills questionnaire-parents (Spence, 1995) to measure students' social skills as part of a longer term follow-up study of student progress following the transition to secondary school. The results of this research will be reported separately.

The twenty-six items in question 6 used a 6-point Likert-type rating scale ranging from 1 'very poor' to 6 'very good' in the student version and 1 'incompetent' to 6 'competent' in the parent and teacher versions. Statements were drawn from an observation profile which itemizes the types of behaviour patterns characteristic of children and young people with Asperger Syndrome (Cumine, Leach, & Stevenson, 1998). This profile has been developed for clinical use based on the 'triad of impairments' (Wing, 1992). For ease of completion, it was decided to make some amendments to the observation profile. This included a reduction in the number of items; changes to the wording of some statements; the inclusion of a few additional items (e.g. "understanding of personal space"); and changing from a 5-point scale to a 6-point scale. These amendments drew on the professional knowledge of the author in close collaboration with the principal teacher (AU) and speech and language therapist, all of whom have considerable knowledge and experience of working with children and young people with ASD and their families. The final version of question 6 contains twenty-six items; eleven focusing on social interaction skills; eight on social communication skills; and seven on social imagination and flexible thinking.

The post-questionnaires incorporated two changes. The two questions on personal passports were omitted. Analysis of responses to these questions in the pre-questionnaires suggested that respondents were unfamiliar with personal passports. That factor and time constraints influenced the decision to exclude personal passports from the programme content. The question which focused on the three things which would most help the student with the transfer from primary to secondary education was replaced by one which requested information on the three things that they would want staff in the secondary school to know about the student.

The method of distribution and completion of the pre-questionnaires was outlined in section 2.2.1.5. Post-questionnaires were completed by the majority of students and parents at a meeting held in the autism unit base in late June 2005. Follow-up home visits were arranged for those who had been unable to attend. In the case of one student and his parent this proved unsuccessful and a follow-up letter failed to elicit a response. The post-questionnaires for class teachers were distributed mid-June 2005 and returned using a stamped addressed envelope.

3 Results

3.1 Consultation with stakeholders

3.1.1 Consultation with parents/carers

In the questionnaire completed by the parents/carers at the information session in March, one of the questions was:

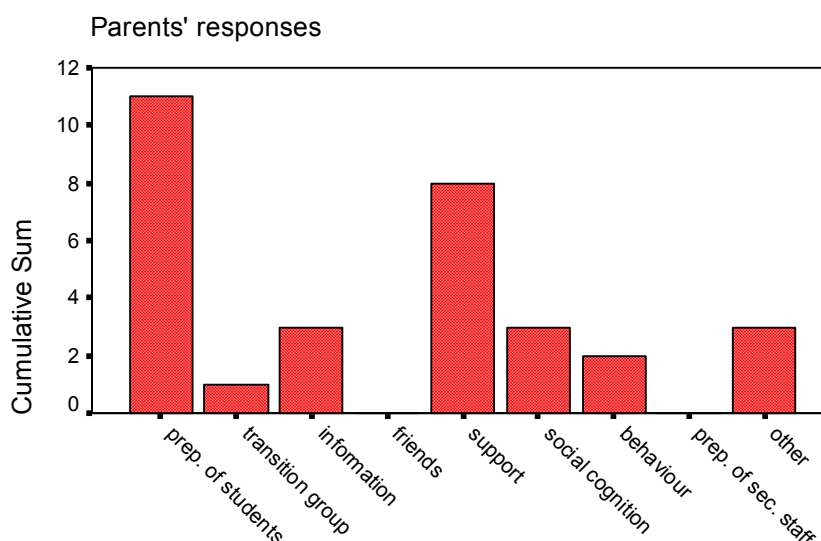
In your opinion what are the three things that would most help your child with the transfer between primary and secondary education?

Figure 1 presents the results of the analysis as described in section 2.2.1.5.

Nine categories were generated, including a catch-all 'other'.

Figure 1

What three things would most help in the move?



The category with the highest frequency of comments was “preparation of the students”. The next most common category was “support”.

3.1.2 Consultation with primary school teachers

In the questionnaire completed by the class teachers of participating students prior to commencement of the group work sessions, one of the questions was:

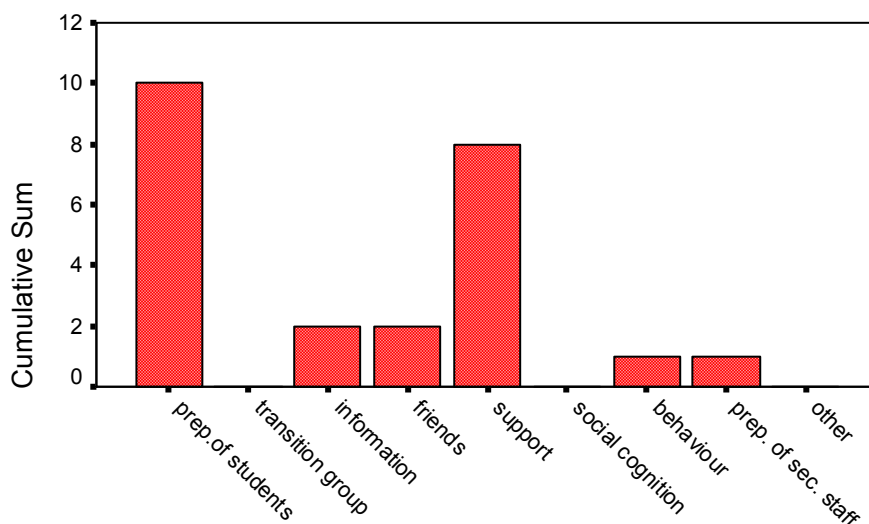
In your opinion what are the three things that would most help your student with the transfer between primary and secondary education?

Figure 2 presents the results of the analysis as described in section 2.2.1.5. Nine categories were generated, including a catch-all 'other'.

Figure 2

What three things would most help in the move?

Teachers' responses



The category with the highest frequency of comments was “preparation of the students”. The next most common category was “support”.

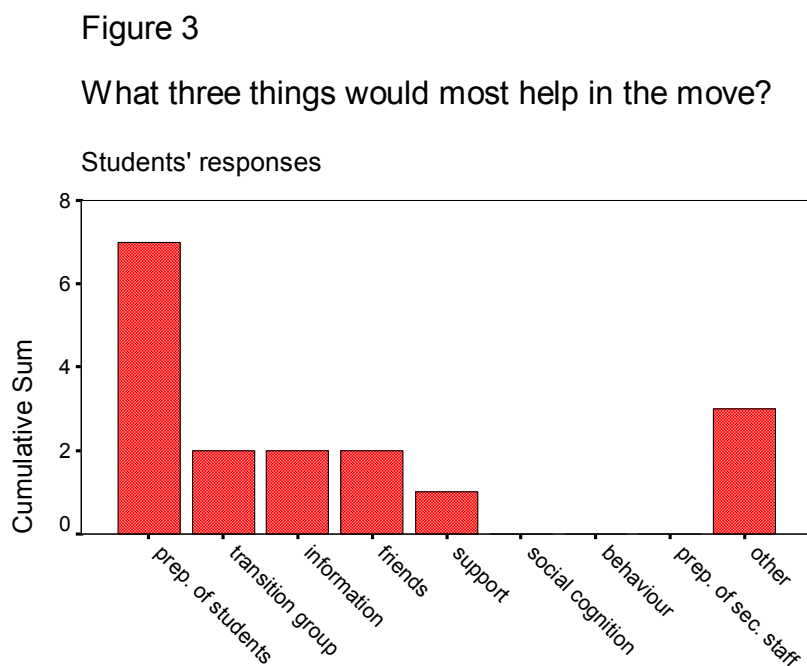
3.1.3 Consultation with students

In the questionnaire completed by the participating students prior to commencement of the group work sessions, one of the questions was:

What three things would most help you with the move from primary to secondary school?

Figure 3 presents the results of the analysis as described in section 2.2.1.5.

Nine categories were generated, including a catch-all 'other'.



The category with the highest frequency of comments was “preparation of the students”. The next most common category was “other”.

3.2 Transition programme evaluation questionnaire

During the last session, all nine students completed the transition programme evaluation questionnaire (Appendix 18).

Questions 1 to 3 related to the use of the Arfur Moe transition workbook as one element of the transition programme. Six of the students felt that the high school questionnaire helped them think about the things they might need help with at secondary school; seven liked filling in the worksheets; and six felt that they had enough time to complete the worksheets.

Question 4 assessed how helpful the students found each of the worksheets in the Arfur Moe transition workbook using a four-point rating scale. The results are summarized in Table 1.

Table 1 Summary of Responses to Question 4

Component	Didn't help me	Quite helpful	Very helpful	Not sure
Finding your way around	1	3	4	0
School map	0	7	1	0
The timetable	0	3	4	1
Timetable practice	0	4	3	1
My new timetable	0	6	2	0
Homework	2	3	3	1
Homework questionnaire	2	4	2	1
Equipment	0	1	6	2
School Rules	0	2	6	1
Rumours	1	3	3	2
Meeting new people	0	2	6	1
Making new friends	0	2	6	1

Note: Totals do not add up to 9 due to missing data.

Overall, the majority of activities were perceived as being 'quite helpful' or 'very helpful'. The activities in the transition workbook that were given the highest rating (based on the number rating it 'very helpful') were 'equipment', 'school rules', 'meeting new people' and 'making new friends'. Those rated less highly (based on the balance between 'quite helpful', 'very helpful' and 'not helpful') were 'school map', 'my new timetable', 'homework' and 'homework questionnaire'.

Questions 5 to 13 considered other components of the programme using a four-point rating scale. The results are summarized in Table 2.

Table 2 Summary of Responses to Questions 5 - 13

Component	Didn't help me	Quite helpful	Very helpful	Not sure
Relaxation techniques	0	0	6	1
What is Asperger Syndrome?	1	1	6	0
Conversation skills	0	4	3	1
Taking things literally	0	4	2	2
Looking at our senses	0	2	6	0
Body language	0	6	3	0
Mind reading	3	3	3	0
Home tasks	2	6	1	0
Weekly comments	0	5	3	1

Note: Totals do not add up to 9 due to missing data.

Overall, the majority of activities were perceived as being 'quite helpful' or 'very helpful'. Activities given the highest rating (based on number rating it 'very helpful') were 'relaxation techniques', 'what is Asperger syndrome?', and 'looking at our senses'. Components rated less highly (based on the balance between 'quite helpful', 'very helpful' and 'not helpful') were 'body language', 'mind reading, and 'home tasks'.

Two students made supplementary comments in the final open-ended question as illustrated in the quotes in Table 3.

Table 3 Responses to Question 14

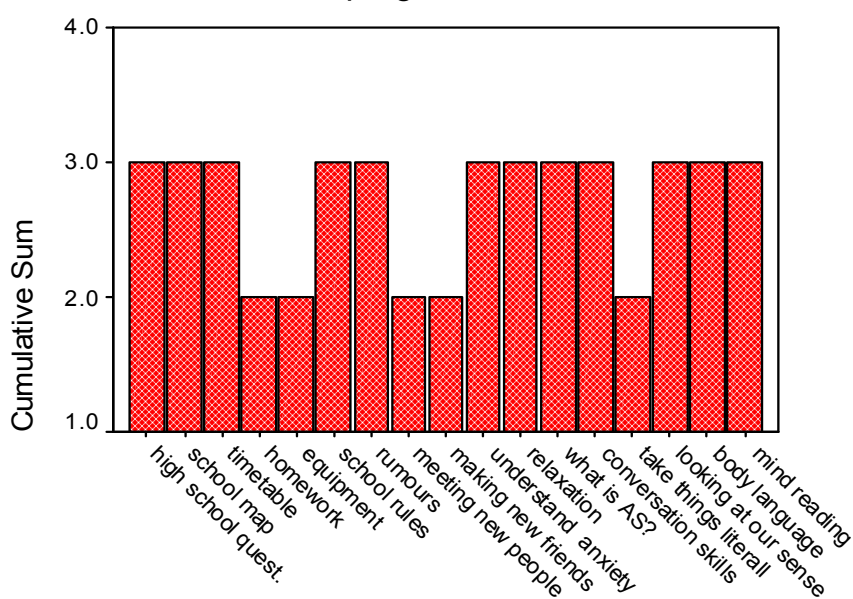
The thing I liked the most was relaxation. The computer was fun but it didn't help me
Peace, love and empathy to all!

3.3 Observation of programme sessions

This writer rated each of the activities using a 3-point rating scale to gauge students' level of engagement (section 2.2.3.2). The results are summarized in Figure 4.

Figure 4

Observation of programme activities



Note: 3-point rating scale where 1=low; 2=medium; and 3=high

Twelve of the activities were rated as achieving high levels of student engagement. The remaining five activities were rated at the medium level.

3.4 Transition programme questionnaire

3.4.1 Parent questionnaire

Completed pre-post questionnaire data were available from eight parents, representing seven students. One data set was randomly selected where both parents had completed pre- and post-questionnaires. Missing data were due to one parent not completing the post-questionnaire and different parents completing the pre- and post- versions. The quantitative data were analysed using descriptive and inferential statistics. The SPSS 11.5 computer package was utilised for this purpose.

3.4.1.1 Information about secondary school

The first part of question 1 asked whether the student had been given any information about the secondary school he would attend. The results are summarized in Table 4.

Table 4 Information about secondary school

	Pre	Post
Yes	3	7
No	3	0
Don't Know	1	0

In the pre-questionnaire, only three out of seven parents reported that their children had any information about the school they would attend. In the

post-questionnaire, all seven parents reported that their children had some information.

Where respondents had ticked Yes to the first part of the question, a follow-up question ascertained the nature of this information. These results are summarized in Table 5.

Table 5 Type of information about secondary school

	Pre	Post
Name	3	7
Location	2	7
How to get to the school	2	6
Layout or map	1	6
Key staff	1	7
Structure of day	1	4
Organized clubs/activities	0	3
Dress Code	2	7

In the pre-questionnaire, the most frequently reported information was the name of the school. In the post-questionnaire, the most frequently reported type of information was 'name', 'location', 'key staff' and 'dress code'. The least frequently reported type of information in both pre- and post-questionnaires was 'organized clubs/activities' although there was an increase between the two time points.

3.4.1.2 Understanding of autism spectrum disorder

Parents were asked to indicate whether their child was aware of his diagnosis using a nominal response set. All seven young people knew of their diagnosis prior to the programme.

Supplementary questions explored parents' perceptions of their child's understanding of his diagnosis and its affect using 6-point rating scales. A Wilcoxon Signed Ranks (WSR) test was conducted to evaluate the impact of the intervention on parents' perceptions of their child's understanding of his diagnosis. There was a statistically significant decrease in ratings from pre- ($M = 3.5$) to post- ($M = 2.29$); $z = -2.07$, $p = 0.019$ (1-tailed). This change was in the expected direction. A WSR test was conducted to evaluate the impact of the intervention on parents' perceptions of their child's understanding of how ASD affects him. Although there was a change in mean ratings in the expected direction from pre- ($M = 2.67$) to post- ($M = 3.14$), the z value was not statistically significant ($z = -0.736$, $p = 0.23$ (1-tailed)).

3.4.1.3 Understanding of expected behaviour in secondary school

Parents were asked to indicate their perceptions of their child's understanding of expected behaviour in a secondary school using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on parents' perceptions of their child's understanding of expected behaviour in secondary school. Although there was a change in mean ratings in the

expected direction from pre- ($M = 3.43$) to post- ($M = 2.86$), the z value was not statistically significant ($z = -0.973$, $p = 0.17$ (1-tailed)).

3.4.1.4 Skills in social interaction, social reasoning, social communication and friendship

Parents were asked to rate their child's skills in social interaction, social reasoning, social communication and friendship using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on these ratings. There was a statistically significant increase in parental ratings for three skills. These were "ability to respond appropriately to criticism" ($z = -1.731$, $p = 0.042$ (1-tailed)); "refraining from making over-frank or inappropriate statements about people" ($z = -1.841$, $p = 0.033$ (1-tailed)); and "ability to accept changes in rules, routines or procedures" ($z = -2.0$, $p = 0.023$ (1-tailed)). Analyses of the mean ratings for pre- and post-data revealed that there were higher mean ratings in a further eleven skills. However, the z values in the WSR Test were not statistically significant. There were lower mean ratings in eight skills, none of which were statistically significant, and no change in the mean ratings of four skills. It should be noted that although reference is made to differences in mean ratings between the two time points, the WSR Test converts scores to ranks and compares them rather than comparing means.

3.4.2 Teacher questionnaire

Completed pre- and post-questionnaire data were available from seven teachers, representing seven students. Missing data were due to one teacher not completing the post-questionnaire and another teacher being unable to provide information as the student was not attending school during the period of the transition programme. The quantitative data were analysed using descriptive and inferential statistics. The SPSS 11.5 computer package was utilised for this purpose.

3.4.2.1 Information about secondary school

The first part of the question asked whether the student had been given any information about the secondary school he would attend the following academic session. The results are summarized in Table 6.

Table 6 Information about secondary school

	Pre	Post
Yes	7	7
No	0	0
Don't Know	0	0

In the pre-questionnaire, all seven teachers reported that their student had been given information about the school he would attend. In the post-questionnaire, this figure was unchanged.

Where respondents had ticked Yes to the first part of the question, a follow-up question ascertained the nature of this information. These results are summarized in Table 7.

Table 7 Type of information about secondary school

	Pre	Post
Name	6	7
Location	6	7
How to get to the school	6	6
Layout or map	2	5
Key staff	3	7
Structure of day	4	7
Organized clubs/activities	3	5
Dress Code	6	7
Other (range of subjects)	1	0

In the pre-questionnaire, the most frequently reported information was the 'name', 'location', 'how to get to school' and 'dress code' of the school. In the post-questionnaire, the most frequently reported type of information was the 'name', 'location', 'key staff', 'structure' and 'dress code'. In the pre-questionnaire, the least frequently reported type of information was 'layout or map' (excluding the 'other' category). In the post-questionnaire, the least frequently reported information was 'layout or map' and 'organized clubs/activities'.

3.4.2.2 Understanding of autism spectrum disorder

Teachers were asked to indicate whether their students were aware of their diagnoses using a nominal response set. From available pre- and post-data, six of the students knew about their diagnosis prior to the programme; while one student didn't. All students had this knowledge following the programme.

Supplementary questions explored teachers' perceptions of the student's understanding of his diagnosis and its effect using a 6-point rating scale. A WSR test was conducted to evaluate the impact of the intervention on teachers' perceptions of their student's understanding of his diagnosis. There was a very slight change in mean ratings in an unexpected direction from pre ($\underline{M} = 2.33$) to post ($\underline{M} = 2.43$). However, the z value was not statistically significant ($z = -0.577$, $\underline{p} = 0.56$ (2-tailed)). A WSR test was conducted to evaluate the impact of the intervention on teachers' perceptions of their student's understanding of the effect of ASD on them. Although there was a change in mean ratings in the expected direction from pre- ($\underline{M} = 3.17$) to post- ($\underline{M} = 3.43$), the z value was not statistically significant ($z = -0.378$, $\underline{p} = 0.35$ (1-tailed)).

3.4.2.3 Understanding of expected behaviour in secondary school

Teachers were asked to indicate their perceptions of their student's understanding of expected behaviour in a secondary school using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on teachers' perceptions of their student's understanding of expected behaviour in secondary school. Although there was a change in the expected direction of mean ratings from pre- (\underline{M} =3.14) to post- (\underline{M} = 2.71), this was not statistically significant (z = -0.68, \underline{p} = 0.25 (1-tailed)).

3.4.2.4 Skills in social interaction, social reasoning, social communication and friendship

Teachers were asked to rate their student's skills in social interaction, social reasoning, social communication and friendship using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on teachers' ratings in these skills. There was a statistically significant increase in teachers' ratings in seven areas. These were "ability to respond appropriately to praise" (z = -1.732, \underline{p} =0.042 (1-tailed)); "ability to choose a partner or group to work with" (z = -2.070, \underline{p} = 0.019 (1-tailed)); "ability to mix appropriately with a group" (z = -1.732, \underline{p} = 0.042 (1-tailed)); " ability to follow verbal instructions in a group setting" (z = -1.857, \underline{p} = 0.032 (1-tailed)); "turn-taking skills" (z = -2.0, \underline{p} =0.023 (1-tailed)); " ability to change behaviour according to the situation" (z = -1.89, \underline{p} = 0.03 (1-tailed)); and "ability to accept others' points of view" (Z = -2.0, \underline{p} =0.023 (1-tailed)).

Analysis of the mean ratings for pre- and post -data revealed that there were higher mean ratings in a further fifteen skills. However, the z values in the Wilcoxon Signed Rank Test were not statistically significant. Furthermore, it

should be noted that there were lower mean ratings in two skills, none of which were statistically significant, and no change in two skills.

3.4.3 Student Questionnaire

Completed pre- and post-questionnaire data were available from eight students. Missing data was due to one student not completing the post-questionnaire. The quantitative data were analysed using descriptive and inferential statistics. The SPSS 11.5 computer package was utilised for this purpose.

3.4.3.1 Information about secondary school

The first part of the question asked whether the student had been given any information about the secondary school he would attend. The results are summarized in Table 8.

Table 8 Information about secondary school

	Pre	Post
Yes	5	8
No	1	0
Don't Know	2	0

In the pre-questionnaire, five of the eight students reported that they had been given information about the school they would attend. In the post-questionnaire, all students had some information.

Where respondents had ticked Yes to the first part of the question, a follow-up question ascertained the nature of this information. These results are summarized in Table 9.

Table 9 Type of information about secondary school

	Pre	Post
Name	4	8
Address	3	3
How to get to the school	4	8
Layout or map	2	6
Head teacher	4	7
Pastoral care teacher	3	7
Start/finish times	3	8
Clubs/activities	5	8
What to wear	5	7
Other (class group)	0	1

In the pre-questionnaire, the most frequently reported information was 'clubs/activities' and 'what to wear'. In the post-questionnaire, the most frequently reported type of information was the 'name', 'how to get to school', 'start/finish times' and 'clubs/activities'. In the pre-questionnaire, the least frequently reported type of information was 'layout or map'. In the post-questionnaire, the least frequently reported information was the 'address' of the school (excluding the 'other' category).

3.4.3.2 Understanding of autism spectrum disorder

Each student was asked to indicate whether he was aware of his diagnosis using a nominal response set. From available pre- and post- data, four of the students indicated that they were aware of their diagnosis prior to the programme; and four students ticked 'don't know'. Following the programme, seven of the students were aware and one student 'didn't know'.

Supplementary questions explored each student's understanding of his diagnosis and its effect using a 6-point rating scale. A WSR test was conducted to evaluate the impact of the intervention on students' understanding of their diagnosis. There was a very slight change in mean ratings in an unexpected direction from pre- ($\underline{M} = 2.0$) to post- ($\underline{M} = 2.14$). However, the z value was not statistically significant ($z = 0$, $p = 1.0$ (2-tailed)). A Wilcoxon Signed Ranks test was conducted to evaluate the impact of the intervention on students' understanding of the effect of ASD. Although there was a change in mean ratings in an unexpected direction from pre- ($\underline{M} = 1.0$) to post- ($\underline{M} = 2.0$), the z value was not statistically significant ($z = -1.342$, $p = 0.09$ (1-tailed)).

3.4.3.3 Understanding of expected behaviour in secondary school

Students were asked to indicate their understanding of expected behaviour in a secondary school using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on students' understanding of expected behaviour in secondary school.

Although there was a slight change in mean ratings in the expected direction from pre- (\underline{M} = 3.0) to post- (\underline{M} = 2.86), this was not statistically significant ($z = 0$, $\underline{p} = 0.5$ (1-tailed)).

3.4.3.4 Skills in social interaction, social reasoning, social communication and friendship

Students were asked to rate their skills in social interaction, social reasoning, social communication and friendship using a 6-point rating scale.

A WSR test was conducted to evaluate the impact of the intervention on students' self-ratings. There were no statistically significant changes in students' ratings in any of the skill areas. Analysis of the mean ratings for pre- and post- data revealed that there were higher mean ratings in nine skills and lower mean ratings in fourteen skills. However, none of the z values in the WSR Test were statistically significant. In addition, there were no changes in the mean ratings for a further three skills.

4 Discussion

As outlined in the introduction, the aims of this research were to:

- Develop and implement a programme designed to facilitate the transition of students with ASD moving from primary to secondary school
- Evaluate a programme designed to facilitate the transition of students with ASD moving from primary to secondary school

The following research questions guided the investigation and will be used to structure the discussion section:

1. What are key stakeholders' views of factors which would help students in the transition from primary to secondary school?
2. What are the participating students' perceptions of the transition programme?
3. What is the researcher's perception of the development and implementation of the transition programme?
4. Does participation in the transition programme result in changes in the students' knowledge and understanding about secondary school?
5. Does participation in the transition programme result in changes in the students' awareness and understanding of autism spectrum disorder?
6. Does participation in the transition programme result in changes in the social interaction, social reasoning, social communication and friendship skills of the students?

The first three questions focus on process aspects of the development and implementation of the programme whereas the final three questions evaluate the impact of the programme in relation to a range of outcomes.

4.1 What are key stakeholders' views of factors which would help students in the transition from primary to secondary school?

As part of the consultation process, prior to commencement of the programme, students were asked "What three things would most help you with the move from primary to secondary school". A similar question was asked of two other groups of stakeholders, namely the parents and the primary school class teachers. The question was phrased in such a way as to tap into perceived needs, and it was intended that the responses would help inform the programme content.

In all three groups, the category with the highest frequency of comments was 'preparation of the students'. Examples of teachers' comments were "familiarity with timetable routine in secondary", "visit to secondary school" and "previous introduction to secondary staff". Examples of parents' statements were "visits to school prior to starting", "meeting teachers for his year" and "to have an in-depth understanding of different teachers/classes and subject system". Students' comments included "learning about the new school", "go for a visit" and "getting to know new teachers".

The second highest category in the teachers' and parents' responses was 'support'. Parents' statements included "a safe area to go to in secondary school" and "someone he can go to if he has any problems". Teachers' comments included "a 'mentor' who could be with them through the early days" and "a safe place to go". The second highest category in the students' responses was the catch-all category "other". One possible reason for the absence of the 'support' category in students' responses could be their limited knowledge and awareness of the secondary school environment and an ability to visualise their needs in that context.

Interestingly, the 'transition group' theme did not emerge as a common category, although this writer would argue that a number of the statements under the 'preparation of child' category were addressed through the transition programme.

In a recent review of the literature (Hannah, 2006), there was consideration of the views of key stakeholders about the transition process for students with ASD. Some similarities were noted with the present study. These included the perceived value of preparatory visits (Johnstone & Patrone, 2003; Douglas, 2002); the provision of support from adults and peers (Ennis & Manns, 2004; Larney & Quigley, 2006; Johnstone & Patrone, 2003); and the passing on of information about the new school (Johnstone & Patrone, 2003).

The role of peers and friends in the transition process has been highlighted in a number of studies of students in the general population (Graham & Hill, 2003; Kvalsund, 2000; Johnstone, 2001) and students with ASD (Johnstone & Patrone, 2003). Although not a dominant theme in this study, it was reflected in two of the teachers' comments and two of the students' comments. Two of the statements pertained to making new friends; and one concerned maintaining contact with a friend.

4.2 What are the participating students' perceptions of the transition programme

The Arfur Moe transition workbook was a key element of the transition programme. Overall, the majority of the students liked filling in the worksheets and thought they were allocated enough time for this. As reported in section 3.2, some of the worksheets were viewed as being more helpful than others. Looking at other components of the programme, it was noted that 'mind reading' received a variable rating. Indeed, 'mind reading' received the highest frequency of 'didn't help me' ratings. It should be noted that this activity was conducted in pairs at a computer and although the students appeared to enjoy the activity it was short in duration (approximately ten minutes). One possible explanation for the low rating is that the students did not have long enough working on the programme to derive benefit and/or had difficulty seeing the relevance of the activity. In one of the completed questionnaire returns, a student commented that "the computer was fun but didn't help me". This may have referred to the mind reading activity.

4.3 What is the researcher's perception of the development and implementation of the transition programme?

Reflecting on the development phase of the programme, this writer is of the view that delays in securing approval for the involvement of a speech and language therapist impacted on the ability of the identified SALT to participate in the early stages of the planning process. Furthermore, there were unexpected delays in securing permissions at authority level. The combined effect led to the decision to restrict the programme to six sessions running over the summer term of session 2004-2005.

In relation to the implementation phase of the programme, this author would like to highlight a number of aspects. Firstly, there were changes to the composition of personnel involved in providing assistance during the sessions. It could be argued that this impacted on the consistency of the approach. To counter this argument, it should be noted that the principal teacher (AU) proved to be a constant figure, present at all the sessions, and taking a key role in facilitating activities. Secondly, a number of adults were present as observers (taxi escorts and secondary school staff). Again, the composition of these observers varied. Potentially, this could have impacted on the operation of the sessions by influencing the behaviour of the students. In this writer's view, based on observations, it did not appear that this concern was justified.

Section 3.3 outlined the results of this author's evaluation of the session activities utilising data drawn from observation notes. The majority of the activities were given a three rating (high) with the remaining activities

receiving a two rating (medium). Consideration had been given to utilising a rating scale incorporating five as opposed to three points, which would have allowed for finer discrimination. However, the level of detail in the observation notes did not allow for this.

There was no evidence of a positive relationship between the researcher's ratings of student engagement and the students' ratings of the helpfulness of different elements of the programme. Looking at the five activities rated at a medium level by the researcher, three were rated highly by the students, namely 'equipment', 'meeting new people' and 'making new friends'.

It is recognized that there are a number of difficulties associated with 'naturalistic' observation. Some writers have suggested that observation in the classroom setting needs to take account of a complex interplay of factors, including within-child, teacher behaviour, nature of the task or activity, and the setting (Dockrell, Lewis & Lindsay, 2000). In this study, the variables involved in each activity included the facilitator, the number of adults present, the composition of adults in a supportive role, the size of the group, the composition of students in the group, and the nature of the task. These factors made it difficult for this writer to draw comparisons across the different activities.

Another perceived difficulty with the use of observation is that it employs an indirect measure of a student's perspective. "The more that a child's perspective is inferred indirectly, the greater the danger of misinterpreting or

overinterpreting what children present” (Lewis & Lindsay, 2000, p.193). In this study, the researcher was attempting to infer students’ levels of interest in various activities using observation of the perceived level of engagement. There are potential problems with this approach as apparent levels of disengagement could be attributed to other factors. For example, it was known that within-child factors of some of the students impacted on their ability to focus on tasks. Another recognized limitation of the research methodology is that data collection, analysis and interpretation were based solely on the writer’s perspective. Ideally, another observer would have been employed to provide ‘observer triangulation’ allowing for measures of inter-rater reliability (Robson, 2002). Another observer (SALT) had taken notes in three of the sessions but there had been no prior collaboration. In retrospect, the availability of two observers for all six sessions would have enhanced the reliability and validity of the findings. Practical aspects precluded this arrangement.

4.4 Does participation in the transition programme result in changes in the students’ knowledge and understanding about secondary school?

One of the questions in the pre- and post-transition questionnaires explored respondents’ perceptions of the information that students had been given about the secondary school they would attend the following August. There were interesting differences between teachers’, parents’ and students’ perceptions in this regard. In the pre-questionnaire data, teachers reported that all their students had been given information about the school they would

attend the following August. This contrasted with figures of 43% for the parents and 63% for the students. One factor in considering the figures for the parents and students was the timescale for placement decisions. This was pertinent as applications had been made in respect of five of the students to attend autism units in mainstream secondary schools the following August. The timescale for placement decisions meant that students and parents would only have been informed as the programme was about to commence. However, this does not explain the higher figure for the teachers. As it transpired, only three of the five students were offered placements in an autism unit. There were fewer differences between teachers', parents' and students' responses in the post-questionnaire data.

In making the transition to a new school, students with ASD have reported concerns about changes to school rules (Johnstone & Patrone, 2003) and having many rules to learn (Douglas, 2002). This writer would argue that having an understanding of new rules would help students have an enhanced appreciation of what is to be expected in their new school. A question in the pre- and post-transition questionnaire considered students' understanding of expected behaviour in secondary school. For all three groups of respondents, there were changes in the expected direction although these did not reach statistical levels of significance.

To what extent can one attribute positive changes in students' level of knowledge about aspects of secondary school to participation in the transition programme? Undoubtedly, the programme provided the students

with information about different aspects of their secondary school. Deliberate efforts were made to personalize the sessions through the provision of school maps, sample first year timetables and homework diaries from the schools the students would be attending. However, it is known that a number of the students took part in pre-arranged visits to their new schools during the period of operation of the programme. On the basis of this writer's knowledge of typical induction visits for prospective students, these would have provided insight into the layout of the school; an opportunity to attend a few lessons; and meet some of the key staff in the school. It is argued that the transition programme would have enhanced and consolidated students' level of knowledge and understanding of the secondary school context. The importance of the provision of information in facilitating transition has been highlighted for students in general (Mizelle, 1999; Carter, Clark, Cusing, & Kennedy, 2005).

4.5 Does participation in the transition programme result in changes in the students' awareness and understanding of autism spectrum disorder?

One of the questions in the pre- and post-transition questionnaire explored the students' awareness and understanding of ASD. All parents and six of the seven teachers reported that the students knew about their diagnosis. It should be noted that a condition of participation in the programme was that the students would have this knowledge. For one student who had received a recent diagnosis, but had no knowledge of this, it was agreed that this information would be shared before commencement of the programme. In

contrast, half of the students indicated that they were aware of their diagnosis and half ticked 'don't know'. In the post-questionnaire, the student figures were seven and one respectively.

One of the potential difficulties when employing questionnaire methodology to elicit children's views is the language. "Children may fail a task because they do not understand the language that is being used or the meanings of specific vocabulary items" (Dockrell et al., 2000, p.53). During the development stage, efforts were made to address these perceived problems. The pilot questionnaire was completed by two children with ASD who were only a year older than those participating in the programme. Furthermore, although the students were encouraged to complete the forms independently, adults were present to provide assistance if required. Despite these efforts, there were some indications of confusion in the students' responses. For example, one of the students had written "what is a diagnosis?" on the form; one had written "maybe" and then ticked 'don't know'; and two had changed their response from 'don't know' to 'yes'.

Looking at levels of understanding of ASD, parents reported that their children had a better understanding of ASD following the programme. This finding was statistically significant. Teachers and students reported a change in an unexpected direction but these results did not reach statistical significance. In relation to students' understanding of how ASD affects them personally, although there were changes in the expected direction for teachers and parents, none reached statistical significance.

4.5 Does participation in the transition programme result in changes in the social interaction, social reasoning, social communication and friendship skills of the students?

The transition questionnaire included a question which involved rating the students on a range of skills in social interaction, social reasoning, social communication and friendship using a 6-point scale. The results were reported in sections 3.4.1.4, 3.4.2.4 and 3.4.3.4.

Comparison of the results reveals interesting differences between the teachers, parents and students. Focusing on statistically significant differences between the pre-post ratings, teachers reported the most change (seven skills), followed by parents (three skills), and then students (zero skills). A possible explanation for the difference between the teachers' and parents' ratings is that teachers would have had more opportunity to observe some of the skills in a school context. It is suggested that this would include such skills as the "ability to choose a partner or a group to work with"; the "ability to mix appropriately with a group"; and the "ability to follow verbal instructions in a group setting".

With regard to students' perceptions of their skills, there were differences in the expected direction in nine skills although none of these reached statistical significance. To counterbalance this, there were lower ratings in fourteen skills and no change in a further three skills. A possible explanation for this finding is that the students gave higher self-ratings, compared with the teachers and parents, at the pre-stage. Perusal of the mean pre-ratings

provided some supporting evidence for this explanation. The mean students' ratings were higher than the teachers' ratings for all skills. Comparison with the parents' ratings revealed a similar pattern whereby all but one of the skills was rated higher by the students.

There is further supporting evidence for this explanation in the literature. A very recent study in Scotland, by Knott, Dunlop and Mackay (2006) of perceptions of social skills and competence in children with ASD found that parents provided significantly poorer ratings than did the children themselves. Despite lower ratings, the children were aware of their difficulties and tended to agree about problematic areas. In an earlier North American study by Koning and Magill-Evans (2001), adolescent boys with Asperger Syndrome (AS) rated themselves as significantly more competent in a measure of social skills compared with their teachers and parents. This was in contrast to the ratings of teenagers in a matched comparison group which did not differ from parents' and teachers' ratings. However, there was a difference in the self-ratings of the two groups suggesting that the adolescents with AS were aware of deficits in their social skills. In contrast to the present study, the participants were from a wider age range (Knott et al., 2006) or were older (Koning & Magill-Evans, 2001); and the measurements instruments differed. Nevertheless, the findings do offer some insight into possible reasons for the rating discrepancies found in this study.

The development of social skills, as one element of the transition process, has been proposed for students in general (Kurtz, as cited in Pietarinen,

2000) and students with ASD (Johnstone & Patrone, 2003; Ennis & Manns, 2004; Larney & Quigley, 2006). The present study has found some reported improvement in social skills following a six session programme which included activities designed to lead to improvements in these areas.

4.7 Limitations of present research

This study considered the development, implementation and evaluation of a transition programme for students with ASD making the transition from primary to secondary school. Process and outcome variables were measured.

In relation to the outcome variables, a pre-post research design was utilised. It is recognized that there are limitations to this design. In particular, in the absence of a control or comparison group, there are dangers in attributing any differences in the pre-post test measures solely to the intervention (Cohen, Manion, & Morrison, 2000). It has been argued that a multiplicity of factors outwith the researcher's control could account for any measured changes, thus limiting the value of the findings. To counter this argument, it has been proposed that the likely effect of intervening confounding variables is reduced when the timescale between the two time points is short. Rossi, Lipsey and Freeman (2004) state that "over time it becomes more likely that other processes will obscure the effects of the program" (p.290). They propose that the pre-post test design is "appropriate mainly for short-term assessment of programs attempting to affect conditions that are unlikely to change much on their own" (p.290). It is argued that this research fulfils that

criterion. The only element which was affected by extraneous variables was knowledge of the secondary school to be attended. During the timescale of the programme, a number of the students participated in induction visits.

Home tasks were a feature of the programme, devised to provide both consolidation of activities outwith the sessions and facilitate parental involvement. The utility of these was evaluated by the students. However, it is recognized that the absence of parental feedback was a missed opportunity to gauge parental perceptions thus providing a means of triangulation.

A similar criticism could be levied at evaluation of the feedback sheets. These sheets provided the opportunity for comments by programme team members, parents and students. They were designed to provide a means of two way communication between the programme team and parents regarding each student's progress; facilitate discussion between participating students and their parents; and give the students an outlet to express their views. Although students were asked for feedback this opportunity was not offered to the parents.

Another perceived limitation of the feedback comments method was that they were based mainly on the researcher's notes supplemented, where possible, by reference to the SALT's notes. There was no opportunity for discussion with other adults taking part in the session as the feedback comments were

taken away by the students at the end of each session. It could be argued that these comments would be subject to observer bias.

Staff from some of the receiving secondary schools had requested information on the students to inform planning to meet their needs in secondary school. It is suggested that there was a missed opportunity to evaluate the utility of this information.

A number of potential difficulties associated with the use of observational methodology were highlighted in section 4.3. The reliability and validity of the method were critiqued. In relation to reliability, the data collection method was not piloted. Furthermore, inter-rater reliability of the two observers was not assessed. Given that the SALT was only present at half the sessions and her notes were limited by her participation in the sessions, analysis of the students' engagement in the activities was based solely on the researcher's notes. With regard to validity, levels of engagement were inferred from the student's behaviour, but as noted earlier, there is the potential for misinterpretation.

Finally, the measure used to evaluate the impact of the programme in relation to the development of social skills was not standardised. There were no norms for either the general population or young people with ASD. The measure was based on an observation profile with recognized clinical utility but not, as far as is known, a research basis.

4.8 Implications for practice

This transition programme was innovatory in nature, developed as it was from a range of materials, some of which were designed for the general population and some specific to students with ASD. As such, it could be considered to be a pilot project with the aim of informing future practice within the council. It was intended that the evaluation would have an action orientation leading to improvements in the approaches adopted within the authority to support students with ASD making the transition from primary to secondary school. As outlined in the introduction, the council is committed to the promotion of inclusion for children and young people with additional support needs, including students with ASD.

A further aim of the research was to add to the body of knowledge in relation to this area. An extensive review of the literature had revealed that there was a paucity of published research into the effectiveness of transition practices for students with ASD (Hannah, 2006). Limitations in this research have been articulated and the following recommendations should be viewed in that context.

1. There should be careful planning for the transition process, which should include approaches designed to prepare students for this significant move. These could include school visits, familiarity with timetable routines, meeting secondary school staff, and understanding of the different subjects.

2. Information about the range of supports in secondary school should be communicated to parents and students at an early opportunity to reduce potential anxieties. These supports could include identification of a key member of staff, the provision of a peer mentor and the identification of a “safe place to go”.
3. The activities in the transition programme were, on the whole, viewed positively by the students. However, some activities were perceived as being more helpful than others. Cognizance should be taken of this information in the planning of any future programmes.
4. Issues of balance in relation to the time apportioned to the different activities and the nature of those activities should be considered. This would increase the likelihood that adequate time is given to those activities with perceived value, and that there is sufficient variety in the choice of activities.
5. Ideally, any future transition programme would be extended from six sessions, providing opportunity to engage in activities in more depth.
6. Informal feedback suggested that the parents valued the opportunity to meet other parents in a similar position. Furthermore, they would have welcomed further opportunities to discuss shared issues and concerns.
7. Informal feedback suggested that the students welcomed the opportunity to meet up with other students with ASD.
8. Various means of maintaining student contacts were considered, including the sharing of telephone numbers and e-mail addresses. Future programmes should take account of this, and ideally establish a means of

supporting ongoing communication once the students have transferred to secondary school.

4.9 Areas for future research

Possible areas for future research are developed below.

1. Further developments of the transition programme have been suggested in the previous section. In particular, extending the number of sessions; looking at the balance of activities; and the time apportioned to activities. Further research is indicated in relation to evaluating the additional benefits to be gained from such developments.
2. The utilization of standardised measurement instruments to supplement informal measures should be considered in future research into the effectiveness of a transition programme.
3. The incorporation of a control or comparison group should be considered. This development would be indicated if the programme were to run over a longer timescale as there would be an increased likelihood of confounding variables between pre-post time points. Given the anticipated small numbers of students meeting the criteria for inclusion in the programme, there may be difficulties with this proposal. One possible solution would be to have two programmes running over the course of the final year of primary education, with one group acting as a control for the other.
4. The role of parents in facilitating the transition process for students with ASD requires further investigation. During the planning and other meetings, it was evident that the parents were anxious about the transition and valued the opportunity to meet and share these concerns.

Further exploration of these aspects, possibly in the form of interviews and or focus group methodology is indicated. Parental perspectives of the transition process were addressed in the follow-up study which will be reported separately.

5. The role of peers in facilitating the transition process for students with ASD would benefit from further research. Previous studies have found that students with ASD share similar concerns to the general population regarding not knowing peers (Johnstone & Patrone, 2003); and being separated from their friends (Johnstone & Patrone, 2003). In this research, the role of friends, although not a dominant feature, emerged as one category during the consultation process. This aspect was addressed in the follow-up study which will be reported separately.
6. Finally, longitudinal research into the longer term benefits of participation in a transition programme and ongoing support needs following transfer is indicated. This is the focus of research by this writer which will be reported separately.

5 Conclusion

This report has provided an account of the development, implementation and evaluation of a transition programme which was designed to facilitate the transition of a group of students with autism spectrum disorder (ASD) moving between the primary and secondary stages of education. Nine male students with Asperger Syndrome, all of whom were in their final year at a mainstream primary school, took part in the study during academic session 2004-2005.

The views of stakeholders were ascertained prior to commencement of the programme and informed its development. Preparation of students emerged as the most common category of response when considering the three things which would most help with the move from primary to secondary school. The researcher was of the view that delays in obtaining relevant permissions impacted on the development phase of the programme.

Overall, the students gave a positive evaluation of the programme rating the majority of activities in the transition workbook and other components of the programme as being 'quite helpful' or 'very helpful'. The researcher found that the students engaged well with the activities in the six sessions. Twelve of the activities received the high level rating and the remaining five activities were rated at the medium level. There was no evidence of a positive relationship between the researcher's ratings of student engagement and the students' ratings of the helpfulness of different elements of the programme.

The impact of the programme was measured using a pre-post questionnaire measure. Involvement in the programme resulted in the students having more knowledge about the secondary schools they would attend. However, it was acknowledged that induction visits which took place during the timescale of the programme would have contributed to this knowledge level. The findings suggested that there were changes in the students' understanding of expected behaviour in secondary school although these were not statistically significant. Parents reported significant improvements in the students' understanding of ASD. Parents and teachers reported improvements in the students' understanding of how it affects them although these results did not reach statistical significance. Finally, some changes in social interaction, social reasoning and friendship skills were found in the pre-post ratings of teachers and parents. Teachers reported the most improvement, with significant differences found in seven of the twenty-six behavioural skills. Parents reported significant changes in three skills. In contrast, there were no areas of significant improvement in the students' ratings. A proposed explanation for this finding was that the students underestimated their difficulties leading to higher ratings at the pre-programme stage.

Some of the limitations of the present study, implications for practice, and possible areas for future research are considered.

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Appendix 1 Development and preparation phase: timetable of key activities

Appendix 1 Development and preparation phase: timetable of key activities

Date	Activity
9.11.04	Meeting with principal teacher (autism unit) to discuss idea of transition programme for students with ASD at primary 7 stage.
7.12.04	Meeting with principal teacher (autism unit) to discuss and plan various aspects including content of programme, number of sessions, timing, role of EP/researcher, possible involvement of speech and language therapist, evaluation of the programme, and gaining relevant permissions at school and authority levels.
23.12.05-30.1.05	Literature search, reading papers and analysis. Literature pertaining to the transition of children and young people with autism spectrum disorder transferring between the primary and secondary stages of education
28.1.05	Discussed research proposal with senior specialist speech and language therapist regarding. Agreement in principle to unit speech and language therapist (SALT) involvement in programme.
28.1.05	Discussion with principal teacher (autism unit) about objectives of the programme, content, outstanding permissions, informed consent of programme participants (students) and other research participants (teachers and parents/carers), and sampling issues.
7.2.05	Discussed research proposal with principal officer (SEN).
7.2.05	Initial trawl for potential candidates restricted to one geographical area (later decision made to extend programme to include students residing in other geographical area)
11.2.05	Meeting with principal teacher (autism unit) to discuss outcome of initial trawl for potential candidates for programme and further consideration of content of sessions, resource materials and evaluation.
14.2.05	Research proposal sent to principal officer (SEN) seeking permission of authority. Copies to area principal psychologists for two areas covered by project and principal teacher (autism unit). Information on research proposal sent to educational psychologists in two areas and request for information (anonymised) on potential candidates for programme (see Appendix 4).
18.2.05	Meeting with principal teacher (autism unit) to draw up adapted research proposal for head teacher of secondary school (location of autism unit) with view to head teacher seeking permission from head of service (SEN) in the authority.

Appendix 1 Development and preparation phase: timetable of key activities (continued)

Date	Activity
6.3.05	Preparation of information leaflets for (a) professionals and parents/carers and (b) students.
7.3.05	Meeting with principal teacher (autism unit), principal officer (SEN) and head of service (SEN) re research proposal. Permission given to proceed with intervention programme and research evaluation. Discussed potential involvement of speech and language therapist and need for management approval; arrangements to access potential student participants; contacts with schools; information leaflets for parents, professionals and young people; and idea of establishing e-networking system for the students.
7.3.05	Information sent to educational psychologists who had identified potential candidates. Request to gain permissions from parents.
7.3.05-23.3.05	Liaison with principal teacher (autism unit) in relation to forthcoming information session; involvement of unit speech and language therapist, an occupational therapist and a social worker; pre-questionnaires; information leaflets; and correspondence with parents and schools
24.3.05	Contact with speech and language therapy manager in relation to involvement of speech and language therapist linked to communication disorder unit. Permission granted.
29.3.05	Information session for parents and students. Consent forms completed.
20.4.05	Planning meeting with principal teacher (autism unit) and unit speech and language therapist. Discussed dates, content and structure of sessions; functions and tasks of personnel involved in delivery and evaluation of programme; involvement of occupational therapists in one session; materials being used
3.5.05	Meeting of programme planning team (principal teacher, unit speech and language therapist and senior educational psychologist) with representatives from the four secondary schools. Covered rationale for programme; proposed structure and content of sessions; method of evaluation. Request for information which could be utilized during the sessions e.g. school map.

Appendix 2 Resource materials for programme

Appendix 2 Resource materials for programme

Author(s)	Date	Title	Publisher	ASD specific
Vermeulen, P	2000	I am special: Introducing children and young people to their autistic spectrum disorder	Jessica Kingsley Publishers Ltd.	Yes
Dunlop, A-W & Knott,F.	2003	Developing Social Interaction and Understandings: A Resource for Working with Children and Young People with Autistic Spectrum Disorder	University of Strathclyde, Faculty of Education	Yes
Spence, S.H.	1995	Social skills training: Enhancing social competence with children and adolescents	NFER-Nelson	No
Jackson,L.	2002	Freaks, geeks and Asperger syndrome	Jessica Kingsley Publishers Ltd.	Yes
Long,R.	1999	Friendships	NASEN	No
Barratt,P., Border,J., Joy,H., Parkinson,A., Potter,M. & Thomas,G,	2000	Developing pupils' social communication skills-practical resources	David Fulton Publishers	No
Baker,J.E.	2003	Social skills training for children and adolescents with asperger syndrome and social- communication problems	Jessica Kingsley Publishers Ltd.	Yes

Appendix 3 Arfur Moe transition workbook (sample extracts)



The Timetable

One of the first pieces of information you will be given in August will be your **timetable**. It's very important because it not only tells you which lessons you will have that day but it also gives you a clue about the equipment you will need to pack in your bag the night before. It also tells you what time each lesson starts and finishes and in which room they will take place. If you haven't got a watch yet, it might be a good idea to buy one to practise telling the time and getting to places on time.



Usually the timetable will also let you know which teacher you will have for each subject. Instead of just one teacher, you're going to have to get used to twelve or more different people being in charge of your class! Sometimes the timetable will have the teacher's initials next to the name of the lesson.

You will probably have 5 or 6 different subjects every day and some will be in special rooms. For example science will usually take place in a laboratory.



One thing to watch is whether your school has a **two week timetable** or not. If your school does use this system, you will have to remember whether you are on week one or week two.



Timetable practice!

Study the timetable from the secondary school and see if you can answer these questions.....



1. When do you spend time with your tutor?

2. Which days will you do P.E.?

3. What equipment will you need to pack for Thursday's lessons?

4. Which room or rooms will you have English in?

5. When is your favourite lesson?

Stick a copy of your timetable in the space provided. If the secondary school hasn't decided on the new S1 timetable yet, stick in this year's timetable as an example.



Rumours!



Most people in your class will probably want to talk about going to secondary school because it's a big step for you all. It's good to talk about all the exciting things ahead of you and it's also good to tell each other about the things you're a bit worried about.



Sometimes though pupils can scare each other unnecessarily because they have listened to **rumours** about what the school is like.

Look up the word "rumour" in the dictionary and write the definition here:

Very often rumours are exaggerated stories. For example, a story that there are gangs of older students taking money from new S1 pupils could be an exaggeration of a one off incident where a S4 boy ran off with £1 when a P1 girl dropped it.

Rumours may have an element of truth in them but usually they contain a lot of things which aren't true. It's best to listen to the **facts** that members of staff tell you rather than the **rumours** pupils from the school might tell you.

Write down some of the rumours you have heard:



Appendix 4 Memorandum to educational psychologists

Appendix 4 Memorandum to educational psychologists

Memo

To: All psychologists, X Area
From: Beth Hannah, Senior Educational Psychologist
CC:
Date: 14/02/05
Re: Proposed Transitions Research

I am in the planning stages of a research project that will focus on the transition process from primary to secondary school for young people with an autistic spectrum disorder.

To ascertain the feasibility of this study, I would be grateful if you could furnish me with information about young people known to you who meet the following criteria:

- I. Stage of Education primary 7
- II. Currently in a mainstream primary school placement (with or without a pupil support assistant)
- III. Diagnosis of autistic spectrum disorder (range of diagnostic labels would fall within the spectrum including high functioning autism, Asperger Syndrome, and childhood autism)
- IV. Anticipated that the young person will move to a mainstream secondary school placement in August 2005 (include details even if there is a degree of uncertainty at this stage but mainstream secondary school is an option)

Please complete table below and return at your earliest convenience.

Child's Initials	Current Primary School Placement	Planned Secondary School Placement	Current Case Psychologist

Completed by:

Date of completion:

Many thanks

Appendix 5 Letter to parents/carers : information session

Appendix 5 Letter to parents/carers : Information session

Dear Parent/Carer

Re Transition Group for Young People with Autism Spectrum Disorder

You will be aware that we are planning to run a transition group for a small number of pupils in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who are transferring to secondary schools in the south side of xxxxx in August 2005.

You and your child are invited to attend an information session in xxxx Secondary School on *Tuesday 29th March at 5.30pm*.

The transfer from primary to secondary school is a difficult process for all young people but especially those with additional support needs such as ASD. Young people with ASD may have limited contact with other young people with similar difficulties. By bringing together young people with ASD and addressing shared issues and concerns it is hoped to ease the transition from primary to secondary school.

The main aims of the programme are to:

- ☐ Help the young people have a better understanding of ASD and how it affects them
- ☐ Help the young people have a better understanding of expected behaviour in a secondary school
- ☐ Help the young people improve their social interaction, social reasoning, social communication and friendship skills
- ☐ Provide the young people with supplementary information about the secondary school they will be attending
- ☐ Develop Personal Passports for the young people

At the information session, you will have the opportunity to meet other parents/carers, hear more about what we are planning to do, and get the chance to express your views. The young people will get the chance to meet up and take part in some enjoyable activities.

Yours sincerely

xxxxxxxxxxxxx
Principal Teacher

Beth Hannah
Senior Educational Psychologist

Please complete and return using SAE

I/we (please delete) are able / not able (please delete) to attend the information session on the Transition Group for Young People with Autism Spectrum Disorder (ASD) on Tuesday 29th March 2005 at 5.30pm.

Signed _____

Appendix 6 Information leaflet for professionals and parents/carers

Appendix 6 Information leaflet for professionals and parents/carers

Transition Group for Young People with Autism Spectrum Disorder

Information Leaflet for Professionals and Parents/Carers

Proposal

There are plans to run group work sessions for a small number of pupils in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who are transferring to secondary schools in the south side of xxxxx in August 2005. It is recognised that there are well-established transition arrangements that typically involve planning meetings, transfer of information and planned visits to the secondary school. This programme has been designed to supplement and not replace such arrangements. Some of the aims outlined below will be amended, as appropriate, following consultation with relevant professionals, parents and the young people themselves.

Rationale

The transfer from primary to secondary school is a difficult process for all young people but especially those with additional support needs such as ASD. Young people with ASD may have limited contact with other young people with similar difficulties. By bringing together young people with ASD and addressing shared issues and concerns it is hoped to ease the transition from primary to secondary school.

Aims

- ❑ Develop and implement a programme designed to improve the social integration of young people with ASD moving from primary to secondary school
- ❑ Evaluate the effectiveness of the programme
- ❑ Help the young people have a better understanding of ASD and how it affects them
- ❑ Help the young people have a better understanding of expected behaviour in a secondary school
- ❑ Help the young people improve their social interaction, social reasoning, social communication and friendship skills
- ❑ Provide the young people with supplementary information about the secondary school they will be attending
- ❑ Develop Personal Passports for the young people
- ❑ Provide a staff development opportunity for staff in the receiving secondary school

When?

There will be six sessions in the summer term: 10th May, 20th May, 27th May, 3rd June, 10th June and 14th June 2005. Each session will run from 2-4pm.

Where?

The group work sessions will take place in a classroom within the Communication Disorder Unit at xxxxx Secondary School. Transport will be arranged.

Who?

The programme is aimed at pupils currently in primary 7 in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD), and who are transferring to secondary school in August 2005. It is anticipated that all pupils will be aware of their diagnosis and be known to psychological services in the xxx and xxxx areas. The anticipated size of the group will be between six and ten.

The principal teacher of xxxx CDU and a senior educational psychologist are involved in the development of the programme. A speech and language therapist will be involved in an advisory capacity during the development phase and, possibly, in the implementation phase of the programme.

Programme

Details of the programme will be informed by a needs assessment involving relevant professionals, parents and young people. It is anticipated that it will include activities designed to develop:

- ☐ Understanding of ASD and how it affects the young people as individuals
- ☐ Understanding of expected behaviour in a secondary school
- ☐ Skills in social interaction, social reasoning, social communication and friendship
- ☐ Knowledge about the secondary school they will be attending
- ☐ Personal Passports

The workshops will include role-play, discussion, video recordings and feedback, games and other similar activities. A range of resources will be utilised.

Evaluation

The senior educational psychologist will evaluate the programme. There will be follow up research in the autumn term. This evaluation will inform future plans. A brief summary of the research will be made available to parents/carers, teachers, young people and other interested parties.

Appendix 7 Information leaflet for young people

Appendix 7 Information leaflet for young people

Transition Group for Young People with Autism Spectrum Disorder Information Leaflet for Young People

In August, you will be starting secondary school. This is a big step for you. You have probably started thinking about the move and what secondary school will be like. You may have spoken to your parents and teachers.

To help you prepare for this move, we are running some group sessions for young people with ASD who are going to secondary school after the summer holidays. We have experience of teaching and helping young people with ASD.

During this programme:

- You will learn more about ASD (including Asperger Syndrome) and how it affects you
- You will get the chance to meet other young people with ASD
- You will learn more about what secondary school will be like
- You will learn more about how people behave in secondary school
- You will learn skills which will help you in secondary school
- You will find out who can help you in secondary school

The sessions will take place in a classroom in xxxxxx Secondary School. There will be six afternoon sessions during May and June this year. There will be a small group of young people. The workshops will include a range of games and activities, discussion, role-play and the use of video recordings. These will be fun and useful to you.

We are planning to evaluate the programme. Your views and those of your parents and teachers will be important. This will help us to plan future programmes for young people with ASD.



Appendix 8 Consent form for parents/carers

Appendix 8 Consent form for parents/carers

Transition Group for Young People with Autism Spectrum Disorder Consent Form for Parents/Carers

Participation in Group work Sessions

I/we _____ (*insert name(s)*) agree to my/our son/daughter _____ (*insert name*) taking part in six group work sessions in Hillpark CDU on 10th May, 20th May, 27th May, 3rd June, 10th June and 14th June 2005. Each session will run from 2-4pm.

(please delete as appropriate)

Video Recording of Group work Sessions

I/we _____ (*insert name(s)*) agree to the sessions being video recorded with the understanding that the recordings will only be viewed by participants and those involved in the development, delivery and evaluation of the programme.

The video recordings will be kept secure.

The video recordings will be kept until evaluation of the programme is completed.

I/we am/are aware that I/we may withdraw this permission at any time.

(please delete as appropriate)

Signature(s) _____ (*parent/carer(s)*)

Date: _____

Signature _____ (Senior Educational Psychologist)

Date : _____

Appendix 9 Parent questionnaire (pre)

Appendix 9 Parent questionnaire (pre)**Personal Information**

Name of child _____

School _____

Your name _____

Relationship to child _____

Date of completion _____

Transition Group for Young People with Autism Spectrum Disorder Questionnaire for Parents/Carers

Information about Secondary School

1. Has your child been given information about the secondary school that he/she will attend?

Yes _____ No _____ Don't know _____

If Yes, what information has been provided? *(please tick all that apply)*

Name of the school	_____
Location of the school	_____
How to get to the school	_____
Layout or map of the school	_____
Key staff in the school	_____
Structure of the school day	_____
Organised clubs or activities	_____
Dress code	_____
Other <i>(please specify)</i>	_____

Personal Passports

2. Does your child have a personal passport? (a booklet or leaflet with information about your child which is shared with relevant adults)

Yes _____ No _____ Don't know _____

If Yes, are there plans to update the personal passport before your child's transition to secondary school?

Yes _____ No _____ Don't know _____

3. If you answered Yes to Q2, who has seen the passport? *(please tick all that apply)*

Head teacher _____
 Class teacher(s) _____
 Classroom assistant(s) _____
 Other _____

Understanding of Autism Spectrum Disorder

4. Does your child know about his/her diagnosis?

Yes _____ No _____

If Yes, please rate the following statements.

My child has a good understanding of his/her diagnosis

Strongly agree 1 2 3 4 5 6 Strongly disagree

My child has a good understanding of how it affects him/her.

Strongly disagree 1 2 3 4 5 6 Strongly agree

Understanding of Expected Behaviour in Secondary School

5. How would you rate your child's degree of understanding of expected behaviour in a secondary school?

High degree 1 2 3 4 5 6 Low degree

Skills in Social Interaction, Social Reasoning, Social Communication and Friendship

6. The table below includes a range of skills in social interaction, social reasoning, social communication and friendship. Please rate your child's current level of competence in these skills using the following 6 point scale. *(tick appropriate boxes)*

Incompetent 1 2 3 4 5 6 Competent

Skill	1	2	3	4	5	6
Ability to read facial expression, gesture, body posture and eye-to-eye gaze						
Ability to use facial expression, gesture, body posture and eye-to-eye gaze						
Understanding of personal space						
Ability to respond appropriately to criticism						
Ability to share an activity with other children						
Ability to share an activity with an adult						
Ability to share in others' enjoyment/pleasure						
Ability to respond appropriately to praise						
Ability to choose a partner or group to work with						
Ability to mix appropriately with a group						
Ability to develop peer friendships						
Ability to follow verbal instructions in 1:1 setting						
Ability to follow verbal instructions in a group setting						
Ability to start a conversation						
Ability to finish a conversation						
Ability to maintain an appropriate conversation						
Showing awareness of the listener's interests						
Showing interest in listener's interests						
Turn-taking skills						
Refraining from making over-frank or inappropriate statements about people						
Ability to have varied interests						
Ability to share interests						
Ability to change behaviour according to the situation						
Ability to accept changes in rules, routines or procedures						
Ability to accept others' points of view						

Ability to plan an event or a task						
------------------------------------	--	--	--	--	--	--

7. In your opinion what are the three things that would most help your child with the transfer between primary and secondary education?
(please note below)

(a) _____

(b) _____

(c) _____

8. Any other comments

Thank you for taking the time to complete this questionnaire

Appendix 10 Consent form for students

Appendix 10 Consent form for students

Transition Group for Young People with Autism Spectrum Disorder Consent Form for Young People

Participation in Group work Sessions

I _____ (*insert name(s)*) agree to taking part in six group work sessions in xxxxxx CDU on 10th May, 20th May, 27th May, 3rd June, 10th June and 14th June 2005. Each session will run from 2-4pm.

Video Recording of Group work Sessions

I _____ (*insert name(s)*) agree to the sessions being video recorded with the understanding that the recordings will only be seen by other young people taking part and by adults involved in the development, delivery and evaluation of the programme.

The video recordings will be kept secure.

The video recordings will be kept until evaluation of the programme is finished.

I am aware that I may withdraw this permission at any time.

Signature(s) _____ (Young Person)

Date: _____

Signature _____ (Senior Educational Psychologist)

Date : _____

Appendix 11 Student questionnaire (pre)

Appendix 11 Student questionnaire (pre)

Transition Questionnaire

Information about Secondary School

1. Have you been told anything about the secondary school you will attend in August?

Yes _____ No _____ Don't know _____

If Yes, what information have you been given? *(Please tick all that apply)*

Name of school	_____
Address of school	_____
How I will get to school	_____
Layout or map of the school	_____
Name of the head teacher	_____
Name of my pastoral care teacher	_____
Start/finish times	_____
Clubs/activities	_____
What to wear	_____
Other <i>(please comment)</i>	_____

Personal Passports

2. Do you have a personal passport? (a booklet or leaflet which has information about you which is shared with your parent(s), teacher(s) and classroom assistants)

Yes _____ No _____ Don't know _____

If Yes, are there plans to change the personal passport before you go to secondary school?

Yes _____ No _____ Don't know _____

3. If you answered Yes to Q2, who has seen your personal passport?
(please tick all that apply)

Head teacher _____
 Class teacher(s) _____
 Classroom assistant(s) _____
 Other _____

Understanding of Autism Spectrum Disorder

4. Do you have a diagnosis?

Yes _____ No _____ Don't know _____

If Yes, please rate the following statements.

I have a good understanding of my diagnosis.

Strongly agree 1 2 3 4 5 6 Strongly disagree

I have a good understanding of how it affects me.

Strongly agree 1 2 3 4 5 6 Strongly disagree

Understanding of Expected Behaviour in Secondary School

5. How good is your understanding of how people behave in secondary school?

Very good 1 2 3 4 5 6 Very poor

Social Skills

6. How would you rate your ability in these social skills?

Please complete the table below *(please tick one box for each skill)*

Very poor 1 2 3 4 5 6 Very good

Skill	1	2	3	4	5	6
Understand facial expression, gesture, and body posture						
Use facial expression, gesture, and body posture						
Understand personal space						
Respond to criticism						
Share an activity with other children						
Share an activity with an adult						
Share in others' enjoyment/pleasure						
Respond to praise						
Choose a partner or a group to work with						
Mix with other children in a group						
Make friends						
Follow instructions given by adult when on my own						
Follow instructions given by adult when one of a group						
Start a conversation						
Finish a conversation						
Keep a conversation going						
In a conversation, show awareness of listener's interests						
In a conversation, show interest in listener's interests						
Turn-taking						
Avoid making inappropriate statements about people						
Have a range of interests/hobbies						
Share my interests/hobbies with others						
Change my behaviour according to the situation						
Accept changes in rules, routines or procedures						

Accept others' points of view						
Plan an event or a task						

7. What three things would most help you with the move from primary to secondary school? *(please write these below)*

(a) _____

(b) _____

(c) _____

Do you want to add anything else?

Thank you for completing this questionnaire

Appendix 12 Letter A to head teachers of primary schools

Appendix 12 Letter A to head teachers of primary schools

Dear Head Teacher

Re Transition Group for Young People with Autism Spectrum Disorder

We are planning to run a transition group for a small number of pupils in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who are transferring to secondary schools in the south side of xxxxx in August 2005.

We have approached the parents of identified pupils via the child's educational psychologist to ascertain whether they would be agreeable in principle to their child being considered for the programme. We have arranged an information session for parents/carers and children in xxxxx Secondary School on Tuesday 29th March at 5.30pm.

We are seeking your permission to allow _____ to participate in the programme as the sessions will be during school hours. There will be six sessions in total: 10th May, 20th May, 27th May, 3rd June, 10th June and 14th June 2005. Each session will run from 2pm-4pm.

Education Services are supporting the programme and have agreed to meet transport costs. However, we have to provide adult escorts. Do you have a member of staff who could be released to undertake this role? This member of staff would be able to participate in the sessions, thus providing a staff development opportunity.

An information leaflet is enclosed.

Yours sincerely

xxxxxxxxxxxx
Principal Teacher

Beth Hannah
Senior Educational Psychologist

Appendix 13 Letter B to head teachers of primary schools

Appendix 13 Letter B to head teachers of primary schools

Date: 26th April 2005

Dear xxxxxxxxxxxx

Re Transition Group for Young People with Autism Spectrum Disorder

As you are aware we are planning to run a transition group for a small number of pupils in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who are transferring to secondary schools in the south side of xxxxxxxxxxxxxxxxx in August 2005.

I would be most grateful if you could ask the class teacher of xxxxxx if he/she would be willing to complete and return the enclosed questionnaire and sheet with personal information using the enclosed SAE. The questionnaire should take about 10-15 minutes to complete. This information will assist in the development and evaluation of the programme.

I enclose a covering letter to the class teacher and a leaflet which provides more detailed information on the programme. It should be noted that one of the dates in the leaflet should be changed from 27th May to 24th May.

I should like to thank you for your cooperation in this matter.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 14 Letter to class teachers in primary schools

Appendix 14 Letter to class teachers in primary schools

Dear _____

I am a senior educational psychologist working in the xxxx area of xxxx with a specialist remit in the area of autism spectrum disorder (ASD). My field of interest is the transition of young people with autism spectrum disorder between the primary and secondary stages of education.

I am writing to you as the class teacher of a young person with ASD who is due to transfer to secondary school in August 2005.

A transition programme is being developed for young people with ASD in the xxxx and xxx areas of xxxx. This programme and its evaluation is being supported by Education Services, xxxxx City Council. It will inform future policy and practice. The information you supply will assist in the development and evaluation of the programme.

Personal information will be retained separately from the completed questionnaires, which will be coded for analysis. A brief summary of the research will be made available to parents/carers, teachers, young people and other interested parties.

Please return completed questionnaires to the address above by _____ using the enclosed SAE.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 15 Teacher questionnaire (pre)

Appendix 15 Teacher questionnaire (pre)**Personal Information**

Name of child _____

School _____

Your name _____

Your designation _____

Date of completion _____

Transition Group for Young People with Autism Spectrum Disorder Questionnaire for Class Teachers

Information about Secondary School

1. Has your student been given information about the secondary school that he/she will attend?

Yes _____ No _____ Don't know _____

If Yes, what information has been provided? *(please tick all that apply)*

Name of the school	_____
Location of the school	_____
How to get to the school	_____
Layout or map of the school	_____
Key staff in the school	_____
Structure of the school day	_____
Organised clubs or activities	_____
Dress code	_____
Other <i>(please specify)</i>	_____

Personal Passports

2. Does your student have a personal passport? (a booklet or leaflet with information about the pupil which is shared with relevant adults)

Yes _____ No _____ Don't know _____

If Yes, are there plans to update the personal passport before your student's transition to secondary school?

Yes _____ No _____ Don't know _____

3. If you answered Yes to Q2, who has seen the passport? *(please tick all that apply)*

Head teacher _____
 Class teacher(s) _____
 Classroom assistant(s) _____
 Other _____

Understanding of Autism Spectrum Disorder

4. Does your student know about his/her diagnosis?

Yes _____ No _____

If Yes, please rate the following statements.

My student has a good understanding of his/her diagnosis

Strongly agree 1 2 3 4 5 6 Strongly disagree

My student has a good understanding of how it affects him/her.

Strongly disagree 1 2 3 4 5 6 Strongly agree

Understanding of Expected Behaviour in Secondary School

5. How would you rate your student's degree of understanding of expected behaviour in a secondary school?

High degree 1 2 3 4 5 6 Low degree

Skills in Social Interaction, Social Reasoning, Social Communication and Friendship

6. The table below includes a range of skills in social interaction, social reasoning, social communication and friendship. Please rate your student's current level of competence in these skills using the following 6 point scale (*please tick in appropriate boxes*).

Incompetent 1 2 3 4 5 6 Competent

Skill	1	2	3	4	5	6
Ability to read facial expression, gesture, body posture and eye-to-eye gaze						
Ability to use facial expression, gesture, body posture and eye-to-eye gaze						
Understanding of personal space						
Ability to respond appropriately to criticism						
Ability to share an activity with other children						
Ability to share an activity with an adult						
Ability to share in others' enjoyment/pleasure						
Ability to respond appropriately to praise						
Ability to choose a partner or group to work with						
Ability to mix appropriately with a group						
Ability to develop peer friendships						
Ability to follow verbal instructions in 1:1 setting						
Ability to follow verbal instructions in a group setting						
Ability to start a conversation						
Ability to finish a conversation						
Ability to maintain an appropriate conversation						
Showing awareness of the listener's interests						
Showing interest in listener's interests						
Turn-taking skills						
Refraining from making over-frank or inappropriate statements about people						
Ability to have varied interests						
Ability to share interests						
Ability to change behaviour according to the situation						
Ability to accept changes in rules, routines or procedures						
Ability to accept others' points of view						
Ability to plan an event or a task						

7. In your opinion what are the three things that would most help your student with the transfer between primary and secondary education?
(please note below)

(a) _____

(b) _____

(c) _____

8. Any other comments

Thank you for taking the time to complete this questionnaire

Appendix 16 Letter A to head teachers of secondary schools

Appendix 16 Letter A : head teachers of secondary schools

30 March, 2005

Dear xxxxxxxxxxxxxxxx

Re Transition Group for Young People with Autism Spectrum Disorder

We are planning to run a transition group for a small number of pupils in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who are transferring to secondary schools in the south side of xxxxxx in August 2005.

We have approached the parents of identified pupils via the child's educational psychologist and met them and their children at an information session held in xxxxxx Secondary School on Tuesday 29th March. xxxxxxx (xxxxxxx Primary) will be participating in the programme, which will take place on the afternoons of 10th May, 20th May, 24th May, 3rd June, 10th June and 14th June 2005.

We would like to invite your PT SfL, xxxxxx, and a relevant member of the Pastoral Care team to a meeting at 3.30pm on Tuesday May 3rd here at xxxxxxxx CDU to discuss the transitions programme that we have designed. We would also welcome your and their comments, suggestions and appreciate any input that you may be able to give.

Education Services are supporting the programme and xxxxxxxxxxxx has indicated that she would be interested in this programme being a CPD opportunity for receiving secondary schools, if you were able to release a member of staff to be involved at some point in the programme. Please let us know.

An information leaflet is enclosed.

Yours sincerely

xxxxxxxxxxxxxxxxxx

Principal Teacher

cc: xxxxxxxxxxxx PT SfL

xxxxxxxxxxxx (HT xxxxxxxx)

Beth Hannah

Senior Educational Psychologist

Appendix 17 Transition programme content

Appendix 17

Transition Programme Content

Asperger Transitions Programme**Week 1 Tuesday 10th May:****Introductions:**

- Getting to know you session
- Review of the purpose of the group
- Discussion of Group Rules:
 - Listen to the person who is supposed to be talking (wait for a pause to talk during conversation time, raise your hand and wait to be called on during skill times)
 - Talk nicely to each other
 - Take care of equipment, materials and environment.
 - Keep hands, feet and unkind words to yourself

Skill Session 1:**Arfur Moe's workbook:**

- High School questionnaire
- Finding out about my new school

**Break:** Social Skills in the Playground**Skill Session 2:**

- Relaxation techniques

**Finish:**

- Review of session
- Game
- Next week
- Home task

Asperger Transitions Programme

Week 2 Friday 20th May:

Introductions:

- Review of previous session
- Group Rules review
- News time

Skill Session 1:

Arfur Moe's workbook:

- Timetables, homework and equipment



Break: Social Skills in the Playground

Skill Session 2:

- What is Asperger Syndrome?
- Relaxation



Finish:

- Review of session
- Game : 'On my first day at school, I took...'
- Next week
- Home task

Asperger Transitions Programme

Week 3 Tuesday 24th May:

Introductions:

- Review of previous session
- Group Rules review
- News time

Skill Session 1:

Arfur Moe's workbook:

- School rules and social rules



Break: Social Skills in the Playground

Skill Session 2:

- Conversation skills
- Relaxation



Finish:

- Review of session
- Game
- Next week
- Home task

Asperger Transitions Programme

Week 4 Friday 3rd June:

Introductions:

- Review of previous session
- *Group Rules review*
- News time

Skill Session 1:

Arfur Moe's workbook:

- Rumours!!!!
- Meeting new people
- Making friends



Break: Social Skills in the Playground

Skill Session 2:

- Dealing with difficult situations
- Relaxation



Finish:

- Review of session
- Game
- Next week
- Home task

Asperger Transitions Programme

Week 5 Friday 10th June:

Introductions:

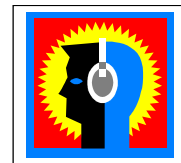
- Review of previous session
- **Group Rules review**
- News time

Skill Session 1:

- **Looking at our senses (OT)** (group 1)
- My Aspergers -taking things literally (group 2)



Break: **Social Skills in the Playground**



Skill Session 2:

- My Aspergers-taking things literally (group 1)
- **Looking at our senses (OT)** (group 2)



Finish:

- **Review of session**
- Game
- **Next week**
- Home task

Asperger Transitions Programme

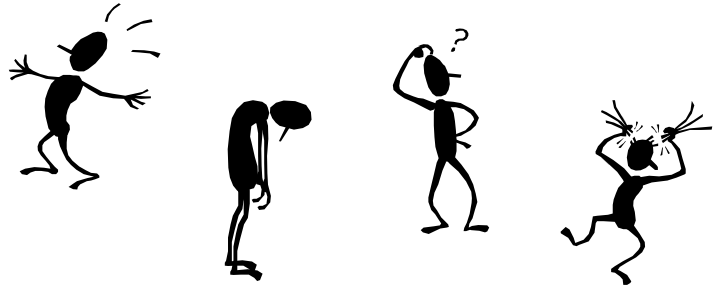
Week 6 Tuesday 14th June:

Introductions:

- Review of previous session
- Group Rules review
- News time

Skill Session 1:

- Body language
- Mind Reading



Break: Social Skills in the Playground

Skill Session 2:

- The wider world of Aspergers : internet activity

Finish:

Review and evaluation

Any Questions?

Keeping in touch

Appendix 18 Example of a home task

Transitions Programme

Home Task for Week 3

Conversations Skills

In Week 3 we talked about Conversation Skills.

We would like you to practise your conversation skills.

1. Ask 3 questions at home each day about other people's interests.
2. Write down their answers in the grid on the next page.
3. Remember to bring your completed grid to the next meeting of the group.

Appendix 19 Transition programme evaluation questionnaire

Transition Programme Evaluation

Name: _____

Primary School: _____

Secondary School: _____



Well done! You have completed the Transition Programme. We hope you feel better prepared for secondary school now.

Please fill in this evaluation. There are no right or wrong answers. Just be honest.

Arfur Moe's Transition Workbook

1. Did Arfur Moe's high school questionnaire help you think about which things you might need help with at secondary school? **YES/NO** (circle your answer)
2. Did you like filling in the worksheets? **YES/NO** (circle your answer)
3. Did you have enough time to complete the worksheets? **YES/NO** (circle your answer)

4. The worksheets were meant to prepare you for secondary school. They told you what to expect and gave you information about secondary school.

Give a score for each worksheet. *(Please tick one box for each worksheet)*

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

	1	2	3	4
Finding your way around				
School map				
The timetable				
Timetable practice				
My new timetable				
Homework				
Homework questionnaire				
Equipment				
School Rules				
Rumours				
Meeting new people				
Making new friends				

Relaxation Techniques

5. How useful did you find the relaxation sessions? *(circle your answer)*

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

What is Asperger Syndrome?

6. How useful did you find the sessions on Asperger Syndrome?

(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Conversation Skills

7. How useful did you find the session on conversation skills?

(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Taking things Literally

8. How useful did you find the session on taking things literally?

(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Looking at our Senses

9. How useful did you find the session taken by the occupational therapists on looking at our senses?

(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Body Language

10. How useful did you find the session on body language?
(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Mind Reading

11. How useful did you find the session on mind reading?
(Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Home Tasks

12. How useful did you find the home tasks? (Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

Weekly Comments

13. How useful did you find the weekly comments? (Circle your answer)

1= didn't help me 2=quite helpful 3= very helpful 4= not sure

14. Do you want to add anything else? (Use the space below)

Thank you for completing this questionnaire

Appendix 20 Letter B to head teachers of secondary schools

Appendix 20 Letter B to head teachers of secondary schools

Date : 18th August 2005

Dear Head Teacher

Re Transition Group for Young People with Autism Spectrum Disorder

A transition programme was organised last session for a small number of students in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and who were due to transfer to secondary schools in the south side of xxxxxx in August 2005.

As part of the evaluation of the programme, we asked each student, their class teacher, parent(s), and personnel involved in organising and running the group to write down the three things that they would most want staff in the secondary school to know about them. Examples could include the student's interests, things he is good at, things that would help him learn at school and things that would help him make friends.

I enclose collated information on the student who is joining your first year group. I would be most grateful if you could arrange for this information to be distributed to relevant personnel.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 21 Observation of sessions

Appendix 21 Observation of sessions

ASD Transitions Programme : Content and Evaluation of Sessions

Week _____

Date _____

Page _____

Appendix 22 Observation of participants

Appendix 22 Observation of participants

ASD Transition Programme : Observation of Participants

Week _____

Date _____

Page _____

Appendix 23 Analysis of data from observation of sessions

Appendix 23

Analysis of data from observation of sessions

Title of activity	Nature of activity	Description of Engagement Level	Rating Engagement Level
High school questionnaire	Individual completion of questionnaire	A few of the boys offered to read sections. Majority of the boys worked well and were focused on the task. Two boys were slightly distracted by camera –one of whom was also quite fidgety.	3
Finding your way around + school map	Worksheet. Discussion of school visits. Individual perusal of school maps + discussion	Boys shared experiences of visits to new school-positive and negative aspects. Perusal of maps of boys' schools generated interest.	3
Timetable + timetable practice	Individual completion of worksheet	Majority of boys listened well although some difficulties noted. Took turns at reading although one boy opted not to read aloud (?literacy difficulties). Some interest shown in different subjects. Contributions but some had difficulty turn-taking. Perusal of sample S1 timetables in boys' schools generated interest.	3
Homework+ homework questionnaire	Individual completion of worksheet and group discussion	One boy evidenced difficulties listening. One boy lacked confidence reading. Two boys were quite restless.	2
Equipment	Individual completion of worksheet and group discussion	Few contributions during discussion	2
School Rules	Individual completion of worksheets and group discussion	Contributed well with examples of own school rules. Role play worked reasonably well (some adult prompting). One boy had difficulty staying focused.	3
Rumours	Individual completion of worksheets and group discussion	One boy appeared uncomfortable (hands over face).	3
Meeting new people	Individual completion of worksheets and group discussion	Some of the boys not interested-bit restless. One boy not interested in meeting new people. One boy put his head down (? uncomfortable with topic). Four boys talked about having been bullied.	2

Title of activity	Nature of activity	Description of Engagement Level	Rating Engagement Level
Making new friends	Individual completion of worksheets and group discussion	One boy was restless and said he wasn't interested in new friends.	2
Understanding anxiety	Group discussion (half group at a time)	One of the boys was initially distracted by presence of camera but relaxed. Another boy disengaged. Good contributions from majority of boys. Overall there was a very good level of engagement.	3
Relaxation	Small group activity (half group at a time)	All 9 boys engaged in activity. 6 boys were able to relax well. 3 boys found it fairly difficult to relax although they tried hard.	3
What is Asperger Syndrome?	<p>Teacher presentation followed by group discussion</p> <p>Investigating websites on AS Half group at a time (further sub-divided). Given details of websites on handout. Only about 10 minutes allocated to activity.</p>	<p>Really good activity. Contributions from number of individuals. Boys volunteered personal information e.g. particular interests. Opportunities in smaller groups to discuss issues. Quotes and anecdotes particularly helpful. Two boys rather fidgety. And restless.</p> <p>Interest evident in information on AS and neurotypical. Discussion between teacher and boys. Boys very focused on activity.</p>	<p>3</p> <p>3 (overall)</p> <p>3</p>
Conversation skills	<p>Worked in small groups with adult facilitator. Who wants to be a millionaire game? (as whole group activity)</p> <p>Recap on conversation skills-discussion</p>	<p>Some good contributions and evidence of understanding. Fun activity.</p> <p>One boy was quite restless.</p>	<p>3</p> <p>3 (overall)</p> <p>3</p>

Title of activity	Nature of activity	Description of Engagement Level	Rating Engagement Level
Taking things literally	<p>Group activity. Half group at a time. Teacher led discussion.</p> <p>Follow-up discussion of home task at beginning of next session.</p>	<p>Contributions from the boys. Boys demonstrated ability to understand many of the expressions. Two of the boys (in group of four) needed reminding of the group rules of listening and turn taking. They were quite restless, one got over-excited. Third boy appeared bored or tired.</p> <p>Excellent sharing of examples of idioms and metaphors. All attentive and contributing.</p>	<p>1</p> <p>2 (overall)</p> <p>3</p>
Looking at our senses	Individual activities using equipment	Evidence of good levels of concentration. Boys motivated to succeed. Worked well with putty. Appeared to enjoy making the CD covers. Conversation between boys during these activities.	3
Body language	Group activity Modelled by adult. Boys modelled expressions and body language.	Evidence of ability to model different feelings and states. One boy was a bit fidgety.	3
Mind reading	Activity in pairs. Using computer based programme. Half group in room at a time further subdivided. Game involved interpretation of facial expressions-work out underlying feelings/emotions. Only about 10 mins allocated to activity..	One boy got very excited-scores in the game-he was very disappointed when he had to leave the game. Fun activity. Generated interest. All boys focused throughout.	3

**Transition Programme for Young People with Autism
Spectrum Disorder Moving from Primary to
Secondary School: Longitudinal Investigation**

Elizabeth Fraser Selkirk Hannah

**Submitted in part fulfillment of the requirements for the Doctorate in
Educational Psychology**

University of Dundee

September 2007

Abstract 3

Transition Programme for Young People with Autism Spectrum Disorder Moving from Primary to Secondary School: Longitudinal Investigation

Elizabeth Fraser Selkirk Hannah

This report describes a longitudinal investigation of a group of students with autism spectrum disorder (ASD) who participated in a primary-secondary transition programme during the summer term of their final year at mainstream primary school. The study followed up the progress of eight of these students during their first year at secondary school. A range of data collection methods and sources were employed. Parents and students completed questionnaires to measure, respectively, the students' social skills and anxiety levels before the summer break and six months following transfer. Parents' and students' retrospective views of transition and the utility of the transition programme were sought using group discussion activities and semi-structured interviews. The students' social functioning in school was explored through semi-structured interviews with the parents, students and teachers. Students had higher than normal anxiety levels at both time points, but there was some evidence of a slight reduction over this period. Over the same timescale, there were improvements in the students' social skills. Parents and students described anticipated concerns about secondary school. Feelings of anxiety mixed with excitement were associated with transition. In comparative terms, the experience of secondary school was viewed positively. Students and parents valued the opportunities provided by the transition programme to meet other students with ASD. Students and parents provided a positive evaluation of the young people's social functioning in school. In contrast, secondary school staff presented a mixed perspective. Implications for educational practice are considered and possible areas for future research are proposed.

Keywords: autism spectrum disorder; transition programme; anxiety; social skills; social functioning.

1 Introduction

1.1 Terminology

In a review of the literature, Hannah (2006) considered definitions and uses of the terms 'transition' and 'transfer'. The term 'transition' tends to have a broad conceptualization having been used to describe any significant change in an individual's life (Anderson, Jacobs, Schramm, & Splittgerber, 2000; Newman & Blackburn, 2002). In the context of the education system, it has been suggested that 'transfer' should be construed as a specific case of transition involving the move from one school to another (Galton, Morrison, & Pell, 2000; Demetriou, Goalen, & Ruddock, 2000). The terms 'transition' and 'transfer' will be utilised in this report when referring to the move from the primary to the secondary stages of education.

The term 'transition period' has been utilised by a number of writers and researchers when referring to educational and developmental transitions (Newman & Blackburn, 2002; Kvalsund, 2000; Pietarinen, 2000; Pellegrini & Long, 2002; Shachar, Suss, & Sharan, 2002). It is a useful way of conceptualizing transition in terms of a process of physical, psychological and social adjustment rather than a 'one off' event. For example, in one study into the transition of students from primary to secondary school in Norway, Kvalsund (2000) refers to the transition as taking time. Students interviewed "talked about it taking until the middle of the second term before things begin to fall into place" (p.420). In this research, the term will be utilised to refer to the period covering a few months prior to and following the change of school.

Spence (1995) defined 'social competence' as the "consequences or outcomes of a person's interaction with other people" (p.7). Short term consequences refer to the individual's actions and feelings; how the individual's behaviour is construed by others; and how others respond to the individual's actions. Suggested long term outcomes include the person's popularity and the number of friends. Whilst recognizing that there is a complex interplay of contributory factors determining the success, or otherwise, of social interactions, Spence (2003) refers to the importance of an individual's social skills. These have been defined as "the specific behaviours that enable a person to be judged as socially competent by others on a particular social task" (McFall, as cited in Spence, 1995, p. 10). Spence (1995) distinguishes between two types of social skills, namely micro-level and macro-level. Micro-level skills include such non-verbal behaviours as eye contact, facial expression, and use of gesture; and verbal behaviours such as tone of voice and clarity of speech. An example of a macro-level skill would be maintaining a conversation. This necessitates the integration of micro-level skills. The terms 'social skills' and 'social competence' as utilised in this report will be based on the preceding definitions.

Finally, it should be noted that for the purposes of this report, the term 'parent' will be utilised in a generic sense to refer to an adult with care responsibility for a child.

1.2 Anxiety in students transferring to secondary school

The relationship between anxiety and transition has been considered in a number of studies. The anticipated move to secondary school has been found to result in higher levels of stress and heightened feelings of anxiety (Pratt & George, 2005). Other researchers, whilst recognizing the existence of such anxieties and fears, emphasise their nature and function in the development of identity as children negotiate transition from primary to secondary school (Lucey & Reay, 2000). Following transfer, the general trend is that students experience a reduction in stress levels (Lohaus, Ev Elben, Ball, & Klein-Hessling, 2004). Lohaus et al. (2004) found a reduction in anxiety levels of students making the transition from one school stage to the next, which they suggested was due to the relaxing effects of the school holiday period. The emergence of individual differences in emotional adjustment to school transfer was noted. Thus, although the overall picture for the school transition group was one of stress reduction, about 30-40% of children “provide more negative self-descriptions after this period” (Lohaus et al., 2004, p.172). A similar pattern was found for the repeated measures control groups suggesting that this effect is independent of a change of school and that there are children who cope less well with transitions.

Anxiety is known to play an important role in the functioning of children and young people with autism spectrum disorder (ASD). In the early 1940s, Kanner (as cited in Gillott, Furniss, & Walter, 2001) thought that many of the core features of autism were anxiety driven. However, there are different perspectives as to the nature of the relationship between anxiety and the

behaviours displayed by children and young people with ASD. Some researchers and clinicians have viewed anxiety as having a causal function in relation to the behaviours displayed. In this explanation, typical behaviours, such as hand flapping and repetitive questioning, are seen as one way in which these children and young people manage and reduce their anxiety levels (Despert, as cited in Gillott et al., 2001). In contrast, anxiety has been seen as a consequence of the core difficulty of coping with changes in the environment, both potential and actual (Grodén, Cantela, Prince, & Berryman, as cited in Gillott et al., 2001). This would suggest that cognitive factors have a role in that anticipation of change results in heightened anxiety levels.

Hannah (2006) failed to source any studies which focused specifically on the role played by anxiety in the transition of students with autism spectrum disorder (ASD). There was evidence that these students shared similar concerns to the general student population about organisational aspects, for example school size and learning new rules; about curricular aspects, including the workload in secondary school; and personal and social aspects, like not knowing peers and being separated from their friends (Johnstone & Patrone, 2003). Similarly, there appears to be a paucity of research evidence about the anxiety levels of students with ASD following transfer.

This study aims to contribute to our understanding of the emotional responses of students with ASD over the transition period. It would be interesting to ascertain whether or not students with ASD experience higher

stress levels and heightened feelings of anxiety in anticipation of the move to secondary school and a reduction in anxiety levels following the transfer. This would be in line with previous studies involving the general student population.

1.3 Social skills and social competence of students making the transition to secondary school

Social aspects of the transition from primary to secondary school were considered in a previous report (Hannah, 2006). Before the transfer, students look forward to making new friends. However, they have concerns about not knowing anyone; being picked on; and leaving the stability of peer relationships formed in the primary school to the insecurity of forming new social groups in the high school. (Graham & Hill, 2003; Johnstone, 2001). The role of peers in helping students negotiate the transition has been highlighted in a number of studies (Pietarinen, 1998; Pietarinen, 2000; Pratt & George, 2005; Caulfield, Hill, & Shelton, 2005). Taking a social constructionist perspective, Kvalsund (2000) sees social relationships and friendships as critical to the development and maintenance of shared understandings of key life events such as transfer to a new school. The role of adults in facilitating the transition process has also been highlighted. For example, teachers are seen as playing a significant role in facilitating social relationships (Pietarinen, 2000).

To assist the transition process, some writers have recommended that more time should be devoted in schools to developing students' social skills (Kurtz,

as cited in Pietarinen, 2000). Suggested approaches have included the production of web-based resources to facilitate the development of social networks with older peers in the high school, same aged peers in other primary schools, and teachers and other adults in the high schools (Johnstone, 2001); peer mentoring schemes involving older peers (Sellman, 2000; Nelson, 2003); and, in relation to students from black and ethnic minority backgrounds, buddy systems and peer mediation systems (Caulfield et al., 2005).

The effectiveness of peer mentoring schemes in facilitating the transition process has been the subject of a number of investigations. Of those reviewed in Hannah (2006), some positive effects were reported (Sellman, 2000; Nelson, 2003). Unfortunately, reliance on subjective data, such as informal feedback, and/or inadequate detail of methodology detracts from the conclusions reached by the researchers.

Difficulties with social relationships are a core feature of individuals with ASD. In his original papers, Asperger describes children who have difficulty joining in with others and becoming anxious if made to participate (Asperger, as cited in Attwood, 1998). In the early 1970s, Wing and Gould conducted an epidemiological study of children aged 0-14 years in the London borough of Camberwell (Frith, 1989). Identification of children with autism was based on the three features of severe social impairment, severe communication impairment and absence of imaginative pursuits. Wing and Gould identified three distinctive types of social impairment, namely 'aloof', 'passive' and

'odd'. Interestingly, in a follow-up investigation many of the children had changed from one category to another which Frith (1989) suggests supports the premise that "the three types of social impairment may all arise out of the same underlying profound disability to form social relationships" (p.60).

It has been proposed that children with ASD, especially those with higher cognitive abilities, can learn social skills although this remains an area of core difficulty (Frith, 1989). Although some studies have suggested evidence of improvement in the social skills of children and adolescents with autism and Asperger Syndrome using a group work approach, concerns have been expressed about a number of aspects of these studies. These include the generalisability of skills learnt in the group work setting to natural contexts; the use of primarily qualitative outcome measures ; the need to base training on a theoretical understanding of the nature of ASD; and the lack of a control group (Dunlop, Knott, & Mackay, 2002; Attwood, 2000). To address limitations of reviewed studies, Dunlop et al. (2002) suggest that it is important to develop the social understanding of children and young people with ASD who participate in group work programmes; and to build in elements such as homework tasks and regular meetings with parents to facilitate generalization of skills. They report an improvement in the social skills and social competence of children aged between six and sixteen years of age who participated in a sixteen session intervention programme. Furthermore, they found some enduring benefits in a twelve month follow-up of the children's progress based on parental reports.

During the transition to secondary school, students with ASD share similar concerns to students in the general population about social aspects such as not knowing peers in their new school; and being separated from their friends (Johnstone & Patrone, 2003). Hannah (2006) reviewed approaches that have been advocated to facilitate the transition of students with ASD from the primary to secondary stages of education. In one study, which considered transition but was not restricted to secondary school transfer, teachers advocated the setting up of buddy systems; the use of social stories; the adoption of social skills programmes to facilitate social interaction; and school staff building up a relationship with the pupil (Johnstone & Patrone, 2003). In the same study, students suggested a number of ways to improve the transition process. These included knowing some of the pupils who would be in their class; avoiding students who had teased them in the previous school; being treated in a more mature fashion; and being given opportunities to talk about any concerns or issues (Johnstone & Patrone, 2003). In those studies which focused exclusively on transition from primary to secondary school, recommended approaches have included the establishment of transition support groups; consideration of informing the peer group about Asperger Syndrome; teaching social skills; and dealing with teasing and bullying 'incidents' (Ennis & Manns, 2004; Larney & Quigley, 2006).

Hannah (2006) considered the effectiveness of recommended approaches and noted that either this aspect was not considered or was measured against the benchmarks of good transition planning for students in general

(Larney & Quigley, 2006). Potential difficulties with this assumption were highlighted. For example, strategies such as social skills programmes advocated for the general population may need to be adapted to suit the specific needs of students with ASD. The review highlighted the need for further research to inform practice.

1.4 Aims and research questions

The focus of this study was the transition of a group of students with autism spectrum disorder (ASD) moving from primary to secondary school. Hannah (2007) considered the development and implementation of the programme; and the first phase of the evaluation. This report considers the second phase of the evaluation.

The main aims of this phase were to:

- Follow-up the progress of a group of students who had participated in a transition programme.
- Explore students' and parents' perspectives of the transition from primary to secondary school.
- Explore students' and parents' perspectives of the utility of a transition programme

The study set out to answer the following research questions:

1. How do the students' anxiety levels immediately prior to transfer compare with those following transfer?
2. How do the students' social skills immediately prior to transfer compare with those following transfer?
3. What are the students' perspectives of the transition from primary to secondary school?
4. What are the parents' perspectives of the transition from primary to secondary school?
5. How do the students view the utility of the transition programme?
6. How do the parents view the utility of the transition programme?
7. What are the students' perspectives of their social functioning in school following transfer?
8. What are the parents' perspectives of their children's social functioning in school following transfer?
9. What are secondary school staff members' perspectives of their students' social functioning in school following transfer?

2 Methodology

2.1 Research design

2.1.1 Nature and type of research

The author is of the view that it is helpful to the reader to articulate the epistemological stance that has been adopted in this research and which has influenced its design and methodology. The position adopted is that of 'critical realism' (Robson, 2002).

Epistemology concerns the ways in which we may acquire and share knowledge. Burrell and Morgan (as cited in Cohen, Manion, & Morrison, 2007) identified the positivist/ anti-positivist dimension as one of four sets of assumptions underpinning research enquiry. The positivist stance views knowledge as something which can be acquired and communicated with others; whereas the anti-positivist stance sees knowledge as something which is subjective and needs to be personally experienced.

Robson (2002) recommends an approach to social enquiry which takes cognizance of some of the criticisms of the traditional positivist approach, whilst retaining the ontological position that reality is external to individuals. Critical realism is the particular version of the realist view of science recommended by Robson (2002). It is 'critical' in that it allows for a critical appraisal of the social practices that are investigated. Robson (2002) argues that "realism can provide a model of scientific explanation which avoids both positivism and relativism" (p.29). One of the advantages of this approach is

the adoption of an emancipatory approach to research, such as taking account of the views of participants. Furthermore, research activities are construed as being value-laden in contrast to the positivist view of facts as being value-free. Thus, the role and influence of the researcher in the enquiry is acknowledged. Thirdly, realism sees knowledge as something which is specific to a particular time and context, thus recognizing the influence of social and cultural factors. Theories, which are employed to help understand and explain what is happening in the real world, can be evaluated on the basis that observations are subject to reinterpretation.

As outlined in a previous report (Hannah, 2007), this research could be construed as falling within the parameters of evaluation research. Robson (2002) describes a number of features and facets of this research paradigm. Typically, there is an action focus. Furthermore, “the purpose of an evaluation is to assess the effects and effectiveness of something, typically some innovation, intervention, policy, practice or service” (Robson, 2002, p.202).

This research had an action focus in that the aim was to design and implement a programme which would make a positive difference to the lives of the participating students. The first phase of the research sought to measure the impact of the programme on their knowledge and understanding of secondary school; their awareness and understanding of autism spectrum disorder; and their social interaction, social reasoning, social communication

and friendship skills. The second phase looked at the longer term impact for participating students.

Anastas and MacDonald (as cited in Robson, 2002) distinguish between fixed and flexible research designs. Fixed designs involve “a very substantial amount of pre-specification about what you are going to do and how you are going to do it” (Robson, 2002, p.4). In contrast, in flexible research designs “much less pre-specification takes place and the design evolves, develops and..... ‘unfolds’ as the research proceeds” (Robson, 2002, p.5).

In relation to the fixed/flexible research dimension, the first phase of the study had elements of both. It incorporated a degree of flexibility with regard to the design and implementation of the programme, by taking account of the views of key stakeholders. The fixed dimension of the research could be seen in the outcome variables which were preset before the programme was implemented.

The second phase of the study was fixed in relation to the standardised measurement of social skills and anxiety levels. However, there were elements of flexibility in the design. Firstly, the design of the reunion meeting activity in the autumn term was not pre-specified before the main part of the research study commenced. Secondly, the focus of the parent, student and teacher interviews in the spring term of the following year was informed by the results of the reunion meeting activity.

2.1.2 Context of the study

The study took place in a large inner city in Scotland. Demographic information and other relevant contextual information were outlined in a previous report (Hannah, 2007).

The transition programme sessions and the reunion activity took place in an autism unit sited within a mainstream secondary school in the south of the city. Interviews with students and parents were conducted in their homes; and those with secondary staff in the students' schools, all of which were located in the south of the city.

2.1.3 Sampling methodology

As outlined and critiqued in a previous report (Hannah, 2007) purposive sampling methodology was used to select the location for the transition programme and the participating students.

There were nine participating students, all male and in their final year of education in a mainstream primary school. Their ages at commencement of the programme ranged from 11 years 3 months to 12 years 4 months (mean = 11 years 8.9 months; standard deviation = 4.6 months). All students had a diagnosis of Asperger Syndrome. One of the students had an additional diagnosis of Tourette Syndrome.

2.2 Measurement instruments

2.2.1 Anxiety questionnaire

2.2.1.1 Design and administration

The anxiety questionnaire in this research was designed to provide a measure of the students' self-reported anxiety levels. It was administered at two time points, namely, immediately prior to the move to secondary school and approximately six months following the transfer. Originally, it had been intended that the first questionnaire would be completed mid-way through the transition programme. However, delays in responses resulted in returns over a period from half way through the programme to just after the completion of the programme.

The utilised questionnaire was based on the Spence Children's Anxiety Scale (SCAS) (Spence, 1997). The SCAS was developed to address limitations in previous measures of children's anxiety based as they were on "downward extensions of adult scales" (Spence, 1997, p.4). It is made up of six-subscales, namely, 'panic attack and agoraphobia', 'separation anxiety', 'physical injury fears', 'social phobia', 'obsessive compulsive' and 'generalized anxiety disorder/overanxious disorder'. These are based on six of the DSM-IV categories of anxiety disorders (Yule, 1997). The full scale has forty-five items comprising thirty-eight anxiety items, six filler items and one open-ended item. The filler and open-ended items are not scored. There is a four- point scale response set (never, sometimes, often and always) for

each item. These are scored 0, 1, 2 or 3 (although the respondent doesn't see these figures).

The SCAS was standardised on a large sample of boys and girls, aged eight to twelve years, in Brisbane, Australia. Means and standard deviations for total and subscale scores by age and gender are provided. There is no information on the socio-economic or racial makeup of the sample. As such, there could be questions as to its applicability to children in a different cultural context. Spence (1997) reports high internal reliability with a coefficient alpha of 0.92 and a Guttman split-half reliability of 0.90. The test-retest reliability level for the total SCAS score over a six month time period was 0.51 which has been described by Spence, Barrett and Turner (2003) as "acceptable 6-month test-retest reliability" (p.607). Internal consistency in the six subscales was not reported for the original standardization sample (Spence, 1997). However, a later study involving adolescents aged 13 and 14 years found 'acceptable' coefficient alphas ranging from 0.60 to 0.80 (Spence et al., 2003). Concurrent validity of the SCAS with a range of measures appears to be of an acceptable level. For example, in a 1997 study by Spence (as cited in Spence, 1997) involving a sample of 2052 children, the Pearson product-moment correlation between the SCAS total scores and the Revised Children's Manifest Anxiety Scale (RCMAS) total scores (Reynolds and Richmond, as cited in Spence, 1997) was 0.71. In the same study, subscales in the SCAS correlated with the RCMAS total scores with values in the range 0.52 to 0.61. The SCAS has been found to have

discriminatory properties between a matched group of clinically anxious children and a non-clinical control group (Spence, 1997).

There have been few studies which have utilised standardised measures of anxiety for children with ASD. Gillott et al. (2001) used the SCAS in a study which compared anxiety levels in children aged between eight and twelve years with high-functioning autism with two comparison groups of normally developing children and children with specific language impairment. The autism group obtained higher mean total scores and in four of the six subscale scores compared with the comparison groups. The four sub-scales were 'panic attack and agoraphobia', 'separation anxiety', 'physical injury fears', and 'obsessive compulsive'.

This study used an adapted version of the SCAS incorporating the four discriminatory subscales from the Gillott et al. (2001) study. The final version of the measurement comprised twenty-six items, there being no filler items or an open-ended item. The four-point scale response set (never, sometimes, often and always) was retained. The Cronbach alpha coefficients in the current study, with the Spence et al. (2003) figures in brackets, were: panic attack and agoraphobic 0.72 (0.80); separation anxiety 0.53 (0.71); physical injury fears 0.75 (0.60); and obsessive-compulsive 0.66 (0.75). However, Cronbach alpha values are sensitive to the number of items in the scale and it is not uncommon to get figures as low as 0.5 for short scales e.g. less than ten items (Pallant, 2001). In that context, it is argued that the reduction from

forty-five to twenty-six items could account for the lower levels in three of the subscales and that the obtained figures are acceptable.

The anxiety questionnaire (Appendix 2) was posted to the parents in late May 2005. Parents were advised by letter (Appendix 1) that the questionnaire should take ten to fifteen minutes to complete. Parents were asked to allow their child to complete the questionnaire as far as possible independently; however, they could provide assistance for clarification purposes. The questionnaires were completed over a period from early June to mid July. Five were received by post using the enclosed stamped addressed envelope. With regard to the remaining students, home visits were arranged. This approach proved successful in relation to three of the students. Questionnaires were completed in the researcher's presence and clarification provided if required. For the remaining student, an attempted home visit and follow-up written communication proved unsuccessful and it was decided to exclude this participant from the follow-up phase of the research.

The same anxiety questionnaire was utilised at the follow-up point. The researcher visited the students at their homes during the period late February 2006 to early April 2006. . Written instructions were provided and were supplemented, where necessary, by verbal explanation. If required, assistance with reading was provided.

2.2.1.2 Analysis of data

For each of the twenty-six items, respondents were asked to tick one of four possible responses. Responses were allocated a score ranging from zero to three. It has been assumed that there are equal intervals between the points on the scale justifying the utilization of statistics requiring interval data. However, a limitation of this approach is that respondents may have treated the response set in a nominal fashion.

The quantitative data was subjected to descriptive and inferential analyses using SPSS version 11.5. The Wilcoxon Signed Rank (WSR) test was employed to compare the scores on each of the twenty-six items at time points one and two. This non-parametric test of repeated measures was used as the data did not meet the criteria for parametric analysis. Furthermore, SCAS subscale scores for the respondents were compared to those of the standardization sample. For the purposes of this analysis, the age of the respondents at each time point was calculated with figures rounded down to the nearest whole number. At time point one, five students were aged eleven years and three students aged twelve years. At time point two, six students were twelve years and two students aged thirteen years. There is evidence that self-reported anxiety levels decrease with age (Spence, 1997). To address this, norms from a study involving a sample of thirteen and fourteen year old adolescents from Brisbane, Australia (Spence et al., 2003) were used for the two students aged thirteen at time point two. Spence et al. (2003) noted that combined norms for thirteen and fourteen year olds were lower than those for twelve year olds (Spence, cited in Spence et al., 2003)

providing further evidence of “a continued decrease in self-reported anxiety scores with increasing age” (p.621). The results of these analyses are summarized in section 3.1.

2.2.2 Social skills questionnaire

2.2.2.1 Design and administration

The social skills questionnaire in this study (Appendix 3) was designed to provide a comparative measure of the students’ social skills at two time points, namely, immediately prior to the move to secondary school and approximately six months following the transfer. Originally, it had been intended that the first questionnaire would be completed mid-way through the transition programme. However, delays in responses resulted in returns over a period from half way through the programme to just after its completion.

The questionnaire used in the current study was based on the Social Skills Questionnaire-Parent(s) (SSQ-P) (Spence, 1995). The social skills questionnaire (SSQ) was one of three instruments developed by Spence (1995) to assess children’s social functioning. These three instruments have been designed to measure social competence, social skills and social anxiety. The following categorization was used by independent adjudicators in relation to the development of the social skills questionnaire: “Social skills, as reflected by specific behavioural responses during interaction with another person, that has been suggested by researchers, practitioners, parents or

teachers to lead to positive outcomes from social interaction” (Spence, 1995, research and technical supplement, p.1)

There are three parallel versions of the SSQ, namely teacher, parent(s) and pupil. The parent(s) version (SSQ-P) consists of the same thirty items as found in the teacher and pupil versions. Spence (1995) reports good levels of internal consistency for the SSQ-P with a Guttman split-half reliability of 0.90 and coefficient alpha of 0.92. Construct validity of the instrument has been demonstrated by the ability of the instrument to differentiate between rejected and popular children (Spence, 1995).

For the purposes of this study, adaptations were made to the original SSQ-P. Firstly, it was decided to reduce the number of items from thirty to fifteen in order to minimize the demands being placed on the respondents. Secondly, the rating scale was changed from a three-point scale (not true, sometimes true, mostly true) to a five-point Likert type scale (strongly agree through to strongly disagree) to provide a more sensitive and differentiated response set (Cohen et al., 2007). The labels at either end of the rating scale were alternated for each statement to avoid a potential response set (Robson, 2002). In the current study, the Cronbach alpha coefficient was 0.65. This is below the alpha level for the original version (0.92) and slightly below the 0.70 level recommended by Kline (as cited in Clark-Carter, 2004) and Pallant (2001). In retrospect, it would have been advisable to pilot the adapted version but time factors precluded this. With regard to test validity, Cohen et al. (2007) suggest that “content validity is achieved by making professional

judgements about the relevance and sampling of the contents of the test to a particular domain” (p. 163). In this study, the selection of items was conducted using a purposive sampling methodology based on the professional judgement of this writer in consultation with other members of the programme team.

2.2.2.2 Analysis of data

For each of the fifteen items, respondents were asked to circle one of five possible responses. Responses were allocated a score ranging from one to five. It has been assumed that there are equal intervals between the points on the scale justifying the utilization of statistics requiring interval data.

The quantitative data were subjected to descriptive and inferential analyses using SPSS version 11.5. To avoid response bias, the rating scale labels in the questionnaire had been reversed for alternate statements. Data entry took careful account of this.

The WSR test was employed to compare the scores on each of the fifteen items at time points one and two. The results of this analysis are summarized in section 3.2.

2.3 Reunion meeting

In October 2005, two months following the transfer to secondary school, participating students and their parents were invited to a reunion meeting

(Appendix 4). The articulated aims of this meeting were to share experiences of the transition process; share views of the transition process; discuss whether further support could be provided during the transition period; and use of the shared information to inform future developments of the programme (Appendix 5).

Eight students and their parents were invited to attend. The ninth student and his parent were excluded from this invitation, this decision having been taken on the basis of apparent disengagement from the research process.

Six students and six parents were in attendance. All three members of the programme team were present, namely the author, the principal teacher (PT) autism unit (AU) and the unit speech and language therapist (SALT).

The author prepared an activity (Appendix 6) which aimed to explore students' and parents' views of the transition process and drew on the methodological approach of group interviewing. One of the advantages of this approach is the "potential for discussions to develop, thus yielding a wide range of responses" (Watts & Ebbutt, as cited in Cohen et al., 2007, p.373). It has been suggested that the group interview is particularly useful in relation to children as it encourages group interaction (Cohen et al., 2007); addresses issues of power and status typical of individual interviews (Mayall, as cited in Greene & Hill, 2000); offers a supportive environment (Jones & Tannock, 2000); and enables the use of familiar language, the opportunity to share ideas and to develop the discussion (Lewis, as cited in Cohen et al., 2007).

One recognized limitation of the research method was that the activity was not piloted prior to its implementation.

Questions were designed by the author. Participants were asked “What has helped you/your son in the transition from primary to secondary school?” Working in pairs, participants identified factors which had assisted the transition process; noted them on flipchart paper; and then prioritized them through the allocation of stickers. Each participant was provided with fifteen stickers. Participants were encouraged to think about all aspects of the transition process and not just the transition programme. The author briefed the two other members of the programme team (PT (AU) and SALT) regarding the purpose and methodology. The second and third questions in the activity were “What else could have helped you/your son in the transition from primary to secondary school?” and “Looking ahead to the next 3 months, what else could help you/your son during the transition period?” Responses were collated on flipchart paper.

During the first part of the session, the group was sub-divided into parents and students. While the researcher facilitated the parents’ group, the PT (autism unit) and SALT facilitated the students’ group in a separate room. The two groups reconvened at the end of the session to share views and discuss similarities and differences in their responses.

The responses to the three questions in the activity were subject to content analysis (Robson, 2002). These questions formed the starting point for the

analysis with collated students' and parents' responses considered separately. It was decided to use meaningful phrases or sentences as the recording unit. Categories were generated in an inductive fashion ensuring that all meaningful phrases/sentences were allocated to categories in an exhaustive and mutually exclusive fashion. A similar procedure was undertaken by a research assistant not involved in the research. Comparison was made of the generated categories; the coding system was revised; further analyses conducted by both parties; and inter-rater reliability calculated using Cohen's Kappa (K) (Robson, 2002). All values of Cohen's Kappa were in the 'good' or 'excellent' range (Fliess, as cited in Robson, 2002, p.342). Any minor anomalies were addressed resulting in an agreed final analysis. The results are outlined in section 3.3.

2.4 Follow-up Interviews

Semi-structured Interviews were used to explore the perspectives of the students, parents and teachers regarding the students' social functioning in school between six and eight months following the transfer. In addition, students' and parents' views of the transition from primary to secondary school and the utility of the transition programme were considered.

The advantages of interview as a research methodology include the facility to address any misunderstandings on the part of the interviewee; enable further exploration of ideas through the use of prompts and probes; and provide rich information (Drever, 1995). Disadvantages include the time required to

conduct the interviews; and the time to process and analyse the interview data (Drever, 1995).

There are specific issues to consider when interviewing children, including the power differential between the adult interviewer and the interviewees (Mayall, as cited in Greene & Hill, 2000); aspects pertaining to children's linguistic and cognitive development (Dockrell, Lewis, & Lindsay, 2000); and children's ability to concentrate and recall information (Ashley & Knight, as cited in Cohen et al., 2007). The use of such techniques as an open question format; making statements rather than asking questions; and avoiding recurrent probing for detail have been suggested as ways of enhancing the effectiveness of methods used to question children (Dockrell, Lewis, & Lindsay, 2000).

It has been recommended that the starting point for the development of an interview schedule should be the research questions (Drever, 1995). Questions 3 to 9 of the research questions outlined in section 1.4 formed the basis for development of the interview schedules:

- What are the students' perspectives of the transition from primary to secondary school?
- What are the parents' perspectives of the transition from primary to secondary school?
- How do the students view the utility of the transition programme?
- How do the parents view the utility of the transition programme?

- What are the students' perspectives of their social functioning in school following transfer?
- What are the parents' perspectives of their children's social functioning in school following transfer?
- What are secondary school staff members' perspectives of their students' social functioning in school following transfer?

Questions 3, 5 and 7 informed the student interview schedule; questions 4, 6 and 8 the parent schedule and question 9 the secondary school staff schedule. The interview schedules were carefully planned and structured for ease of clarity. A preamble reminding each interviewee of the purpose of the interview was provided. Each section of the interview had an introduction explaining the purpose and focus.

Piloting of an interview schedule with individuals from the same population provides invaluable information on a number of aspects of the interview process (Drever, 1995) and addresses threats to reliability (Silverman, as cited in Cohen et al., 2007). In this study, piloting of the student and parent interview schedules was focused on a young person, with Asperger Syndrome, who was in first year at a mainstream secondary school. Although this student met the criteria for inclusion in the transition programme, he did not participate as his parents felt that adequate supports were in situ. The student and his mother were interviewed at home in February 2006. Explanation of the purpose of the interviews was provided. Each interview was approximately thirty minutes in duration. Questions

pertaining to the student's social functioning in secondary school formed the basis of the interview. Verbal feedback from the mother; observation of the student's behaviour and reflection on the conduct of both interviews indicated minor changes such as ensuring adequate space to record verbatim responses; noting any additional prompts or probes; and asking a final "Any other comments?" at the end of the interview. The final versions of the interview schedules can be located in Appendices 7 and 8.

The teacher interview schedule (Appendix 9) was piloted with the pastoral care teacher of the focus student. The interview was conducted in the school premises at a time convenient for the teacher. Observation and reflection on the interview process supplemented by verbal feedback from the interviewee indicated that no changes to the questions or the conduct of the interview were required.

Letters to parents outlining the purpose and nature of the interviews; seeking permission to contact the secondary school head teacher; and make arrangements to interview a member of secondary school staff were distributed in February 2006 (Appendix 10). Interviews with eight students and their parents were conducted by the writer between late February and early April 2006 in the students' homes and at times convenient to the interviewees. The majority of the interviews were conducted with one parent; however one was a joint interview with both parents. In the latter case, comments were combined providing a shared perspective. As indicated in section 2.3, the ninth student was excluded from the reunion meeting due to

disengagement with the research process. This exclusion was extended to the follow-up interviews.

Letters to head teachers, seeking permission to interview a member of staff who knew the student well, were sent out in February 2006 (Appendix 11). Having obtained written consent from parents and students, telephone contact was made with the head teacher or other member of the senior management team. Following that, direct contact was established with the member of staff who would be interviewed. Interviews with eight members of staff, in relation to seven of the students, were conducted by the researcher between mid May and late June 2006 in the school premises at times suitable to the interviewees. Seven of the interviewees were teachers and one was a pupil support assistant. For the purposes of this report the term “teachers” will be employed to refer to staff in the school who participated in the interviews. Efforts to arrange an interview with a member of staff who knew the eighth student proved unsuccessful.

A number of potential threats to the validity of interviewing as a research methodology were acknowledged. Attempts were made to minimize the amount of bias by checking the interviewees’ understanding of questions; using prompts and probes to check that the interviewer understood the responses; and conscious awareness on the researcher’s part of the dangers of seeking answers that support preconceived ideas (Cohen et al., 2007). Threats to reliability were addressed through a range of control measures such as the utilization of the same interview content and format; and the

same interviewer. However, it is recognized that the flexible and interactive nature of the interview process limits the researcher's ability to impose control. It could be argued that this is a flawed approach as attempts to increase reliability through the imposition of control measures are at the expense of validity (Kitwood, as cited in Cohen et al., 2007).

It is generally recommended that interviews are audio taped as they provide a permanent record and enable the interviewer to focus on the interview (Robson, 2002). However, the use of an audiotape recorder has the potential to constrain respondents (Cohen et al., 2007). It was this writer's opinion, based on professional experience of working with children and young people with ASD, that the introduction of a recording device in a one to one interview could be unsettling and anxiety provoking. Therefore, it was decided to make contemporaneous notes of the interviews, recording as far as possible all verbatim comments made by the respondents. Although the introduction of note taking could have the potential to be off-putting, the author is experienced in conducting interviews in her professional practice; and had ascertained during the pilot stage of development of the schedule, that it was possible to make contemporaneous notes while maintaining the flow of the interview.

A blank copy of the interview schedule was used for each interview. The piloting process had established the importance of leaving adequate space to record responses. It was recognized that a potential threat to the reliability of the recording process was the selection of comments as it was not possible

to record every utterance. Furthermore, potentially significant information such as non-verbal communication was lost using this recording method.

The responses to the interview questions were subject to content analysis (Robson, 2002). These questions formed the starting point for the analyses with students', parents' and teachers' responses considered separately. It was decided to use meaningful phrases or sentences as the recording unit. Categories were generated in an inductive fashion ensuring that all meaningful phrases/sentences pertaining to the interview questions were allocated to categories in an exhaustive and mutually exclusive fashion. The categories pertaining to each interview question were allocated a unique highlighter and font colour. A sample extract illustrating this system is provided in Appendix 12. For each question, where there was more than one comment which could be allocated to a particular category, it was decided to count that once. So for example, if a parent referred to the student participating in a number of different clubs that was counted as one reference to clubs.

An educational psychologist not involved in the research checked the applicability of the coding system. Following agreed revision of the categories, the researcher conducted a content analysis of all the interview data. In relation to section 1 of the interview which focused on students' social functioning in secondary school, two sets of interview data from the student, parent and teacher samples were randomly selected and subject to content analysis by the independent coder. Inter-rater reliability was

calculated using Cohen's Kappa (K) (Robson, 2002). With regard to parents' and students' views of the move from primary to secondary school and the utility of the transition programme, a similar procedure was adopted. All values of Cohen's Kappa were in the 'good' or 'excellent' range with the majority in the latter category (Fliess, as cited in Robson, 2002, p.342). The results are summarized in section 3.4.

3 Results

3.1 Anxiety questionnaire

Eight students completed the anxiety questionnaire at time points one and two. Descriptive statistics for each of the four subscales of the anxiety questionnaire are detailed in Tables 1, 2, 3 and 4. The range for each item is zero to three. Minimum and maximum scores, means and standard deviations are provided for each item. The results for each time point are incorporated in the tables for comparative purposes.

Table 1 Descriptive statistics of the panic attack and agoraphobia subscale

Item	N	Minimum	Maximum	Mean	Std. Deviation
I suddenly feel as if I can't breathe when there is no reason for this	8	0	1	.13	.354
I suddenly feel as if I can't breathe when there is no reason for this	8	0	1	.25	.463
I suddenly start to tremble or shake when there is no reason for this	8	0	1	.38	.518
I suddenly start to tremble or shake when there is no reason for this	8	0	1	.25	.463
I feel scared if I have to travel in the car or in a bus or train	8	0	1	.25	.463
I feel scared if I have to travel in the car or in a bus or train	8	0	1	.25	.463
I am afraid of being in crowded places	8	0	2	.38	.744
I am afraid of being in crowded places	8	0	1	.38	.518
All of a sudden I feel really scared for no reason at all	8	0	1	.38	.518
All of a sudden I feel really scared for no reason at all	8	0	0	0	.000
I suddenly become dizzy or faint when there is no reason for this	8	0	1	.13	.354
I suddenly become dizzy or faint when there is no reason for this	8	0	0	0	.000
My heart suddenly starts to beat too quickly for no reason	8	0	1	.25	.463
My heart suddenly starts to beat too quickly for no reason	8	0	1	.38	.518
I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	8	0	1	.38	.518
I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	8	0	1	.38	.518
I am afraid of being in small closed places	8	0	2	.63	.744
I am afraid of being in small closed places	8	0	1	.50	.535

Notes:

1. Non-emboldened figures represent scores at time point 1
2. Emboldened figures represent scores at time point 2

The Wilcoxon Signed Ranks (WSR) test was used to compare the scores at time points one and two for items in the subscale 'panic attack and agoraphobia'. This non-parametric test of repeated measures was used as the data did not meet the criteria for parametric analysis. The WSR instead of "comparing means it converts scores to ranks and compares them at Time 1 and Time 2" (Pallant, 2001, p.262).

There was a statistically significant decrease in anxiety levels in one item in the sub-scale, which was "All of a sudden I feel really scared for no reason at all" ($z = -1.732$, $p = 0.041$ (1-tailed)). A one –tailed test was used as the change was in the predicted direction of a reduction in anxiety levels following transfer to secondary school.

Given the small sample size in this study, with the increased likelihood of type II errors, it was decided to calculate effect sizes. Effect size can be calculated in different ways (Cohen et al., 2007). The formula for calculating Cohen's d as recommended by Glass, McGaw and Smith (as cited in Cohen et al., 2007, p. 521) is:

$$\frac{\text{mean of experimental group} - \text{mean of control group}}{\text{standard deviation of control group}}$$

This formula was utilised substituting time point one for the control group and time point two for the experimental group.

Cohen et al. (2007) provide guidance for interpretation of the statistic Cohen's d as follows:

0-0.20 = weak effect

0.21-0.50 =modest effect

0.51-1.00 =moderate effect

>1.00 =strong effect (Cohen et al, 2007, p 521)

Using the figures above, the effect size for the item "All of a sudden I feel really scared for no reason at all" ($d = -0.73$) was deemed to be moderate. Visual analysis of the other figures indicated that mean scores decreased over time in a further three items and there were increased scores in two items (Table 1).

However, all effect sizes were found to be either weak or modest. Furthermore, there was no change in the mean scores for three items.

Table 2 Descriptive statistics of the separation anxiety subscale

Item	N	Minimum	Maximum	Mean	Std. Deviation
I would feel afraid of being on my own at home	8	0	3	1.00	.926
I would feel afraid of being on my own at home	8	0	1	.63	.518
I worry about being away from my parents	8	1	3	1.25	.707
I worry about being away from my parents	8	0	1	.75	.463
I worry that something awful will happen to someone in my family	8	1	3	1.38	.744
I worry that something awful will happen to someone in my family	8	1	3	1.50	.756
I feel scared if I sleep on my own	7	0	1	.14	.378
I feel scared if I sleep on my own	7	0	1	.14	.378
I have trouble going to school in the mornings because I feel nervous or afraid	8	0	2	.38	.744
I have trouble going to school in the mornings because I feel nervous or afraid	8	0	3	.50	1.069
I would feel scared if I had to stay away from home overnight	8	0	2	.50	.756
I would feel scared if I had to stay away from home overnight	8	0	1	.38	.518

Notes:

1. Non-emboldened figures represent scores at time point 1
2. Emboldened figures represent scores at time point 2

The WSR test was used to compare the scores at time points 1 and 2 for items in the subscale 'separation anxiety'. There were no statistically significant changes in the levels of anxiety using a two-tailed test. Visual analysis of the mean scores indicated that between time points one and two there were lower values in three items and higher scores in two items (Table 2). One of the effect sizes was in the moderate range. This pertained to the

item “I worry about being away from my parents” ($d = -0.71$) where there was a reduction in the mean score over time. In addition, there was no change in the mean score for one item.

Table 3 Descriptive statistics of the obsessive compulsive subscale

Item	N	Minimum	Maximum	Mean	Std. Deviation
I have to keep checking that I have done things right	8	0	2	1.25	.707
I have to keep checking that I have done things right	8	0	3	1.50	.926
I can't seem to get bad or silly thoughts out of my head	8	0	3	1.13	.991
I can't seem to get bad or silly thoughts out of my head	8	0	2	.75	.707
I have to think of special thoughts	8	0	1	.25	.463
I have to think of special thoughts	8	0	1	.13	.354
I have to do same things over and over again	8	0	3	1.13	1.246
I have to do same things over and over again	8	0	2	1.00	.756
I get bothered by bad or silly thoughts or pictures in my mind	7	0	1	.29	.488
I get bothered by bad or silly thoughts or pictures in my mind	8	0	2	.75	.707
I have to do some things in just the right way to stop bad things happening	8	0	2	.25	.707
I have to do some things in just the right way to stop bad things happening	7	0	2	.57	.787

Notes:

1. Non-emboldened figures represent scores at time point 1
2. Emboldened figures represent scores at time point 2

The WSR test was used to compare the scores at time points one and two for items in the subscale ‘obsessive compulsive’. There were no statistically

significant changes in the anxiety levels using a two-tailed test. Visual analysis of the mean scores indicated that there were lower values in three items and higher scores in three items (Table 3). One of the effect sizes was in the moderate range. This pertained to the item “I get bothered by bad or silly thoughts or pictures in my mind” ($d = 0.94$) where there was an increase in the mean score over time.

Table 4 Descriptive statistics of the physical injury fears subscale

Item	N	Minimum	Maximum	Mean	Std. Deviation
I am scared of the dark	8	0	2	.63	.916
I am scared of the dark	8	0	2	.63	.744
I am scared of dogs	8	0	1	.13	.354
I am scared of dogs	8	0	2	.50	.756
I am scared of going to the doctor or dentist	8	0	1	.50	.535
I am scared of going to the doctor or dentist	8	0	1	.63	.518
I am scared of being in high places or lifts	7	0	3	1.14	.900
I am scared of being in high places or lifts	8	0	2	1.00	.756
I am scared of insects or spiders	8	0	2	.63	.744
I am scared of insects or spiders	8	0	2	.87	.835

Notes:

1. Non-emboldened figures represent scores at time point 1
2. Emboldened figures represent scores at time point 2

The WSR test was used to compare the scores at time points one and two for items in the subscale ‘physical injury fears’. There were no statistically significant changes in the anxiety levels using a two-tailed test. Visual analysis of the mean scores indicated that there were lower values in one item and higher scores in three items (Table 4). One of the effect sizes was

in the strong range. This pertained to the item “I am scared of dogs” ($d = 1.05$) where there was an increase in the mean score over time. In addition, there was no change in the mean score for one item.

Given the variability in the direction of change in all four sub-scales, it was decided to conduct an analysis of sub-scale scores by individual over time. The four subscale scores for the eight students who completed the anxiety questionnaire are reported in Table 5.

Table 5 Descriptive statistics of individual subscale scores: SCAS

Respondent	1	2	3	4	5	6	7	8
PAA score time point 1	2 3.70 <i>4.32</i>	6 3.70 <i>4.32</i>	6* 2.45 <i>3.17</i>	2 3.70 <i>4.32</i>	0 3.70 <i>4.32</i>	1 2.45 <i>3.17</i>	0 2.45 <i>3.17</i>	6 3.70 <i>4.32</i>
PAA score time point 2	1 2.45 <i>3.17</i>	3 2.45 <i>3.17</i>	5 1.95 <i>3.20</i>	3 2.45 <i>3.17</i>	1 2.45 <i>3.17</i>	2 1.95 <i>3.20</i>	0 2.45 <i>3.17</i>	4 2.45 <i>3.17</i>
SA score time point 1	2 3.78 <i>2.98</i>	11 pro-rated* 3.78 <i>2.98</i>	4 3.00 <i>2.55</i>	3 3.78 <i>2.98</i>	3 3.78 <i>2.98</i>	8* 3.00 <i>2.55</i>	3 3.00 <i>2.55</i>	5 3.78 <i>2.98</i>
SA score time point 2	2 3.00 <i>2.55</i>	7* 3.00 <i>2.55</i>	2 1.83 <i>2.29</i>	4 3.00 <i>2.55</i>	4 3.00 <i>2.55</i>	4 pro-rated 1.83 <i>2.29</i>	5 3.00 <i>2.55</i>	4 3.00 <i>2.55</i>
OC score time point 1	2 5.90 <i>3.86</i>	7 pro-rated 5.90 <i>3.86</i>	5 5.39 <i>4.02</i>	2 5.90 <i>3.86</i>	3 5.90 <i>3.86</i>	2 5.39 <i>4.02</i>	4 5.39 <i>4.02</i>	10* 5.90 <i>3.86</i>
OC score time point 2	3 5.39 <i>4.02</i>	3 5.39 <i>4.02</i>	7 pro-rated* 3.22 <i>2.86</i>	3 5.39 <i>4.02</i>	7 5.39 <i>4.02</i>	3 3.22 <i>2.86</i>	7 5.39 <i>4.02</i>	5 5.39 <i>4.02</i>
PI score time point 1	2 3.32 <i>2.65</i>	5 pro-rated 3.32 <i>2.65</i>	3 2.94 <i>2.55</i>	8* 3.32 <i>2.65</i>	3 3.32 <i>2.65</i>	1 2.94 <i>2.55</i>	1 2.94 <i>2.55</i>	1 3.32 <i>2.65</i>
PI score time point 2	4 2.94 <i>2.55</i>	5* 2.94 <i>2.55</i>	5* 1.86 <i>2.22</i>	6* 2.94 <i>2.55</i>	6* 2.94 <i>2.55</i>	0 1.86 <i>2.22</i>	1 2.94 <i>2.55</i>	2 2.94 <i>2.55</i>

Notes:

1. Abbreviations: PAA - panic attack and agoraphobia; SA: - separation anxiety; OC - obsessive compulsive; PI - physical injury fears
2. Non-emboldened and non-italicized figures represent raw scores
3. Emboldened figures represent the means from other studies (Spence, 1997; Spence et al., 2003)
4. Emboldened and italicized figures represent the standard deviations from other studies (Spence, 1997; Spence et al., 2003)
5. An asterisk indicates that the score is more than one standard deviation above the mean
6. Where there are missing data, figures have been pro-rated utilising available data

The means and standard deviations of the original standardization sample (Spence, 1997) and those from a study involving older children (Spence et al., 2003) are presented for comparative purposes. For the purposes of this analysis, a score of more than one standard deviation from the mean was considered to be significant.

For the subscale 'panic attack and agoraphobia', one respondent scored more than one standard deviation above the mean at time point one. However, at time point two the score had reduced to within one standard deviation of the mean. In the 'separation anxiety' subscale, two respondents scored more than one standard deviation above the mean at time point one. Both figures were lower at time point two with only one remaining significant. For the subscale 'obsessive compulsive', one respondent scored more than one standard deviation above the mean at time point one but at time point two the score was not significant. However, another student's score increased at time point two reaching a significant level. Finally, in the 'physical injury fears' subscale, one respondent scored more than one standard deviation above the mean at time point one. In contrast, at time point two, half of the respondents had scores which were more than one standard deviation above the mean.

In summary, comparison of individual scores at time points one and two provided evidence of a reduction in anxiety levels in the 'panic attack and agoraphobia' and 'separation anxiety' subscales; an increase in the 'physical

injury fears' scores; and a mixed picture of increased and decreased scores in the 'obsessive compulsive' sub-scale.

3.2 Social skills questionnaire

Eight parents completed the social skills questionnaire at time points one and two. As outlined in section 2.2.1.1., the author's attempts to make contact with the ninth parent proved unsuccessful and it was decided to exclude this participant from the follow-up phase of the research.

Descriptive statistics for the fifteen items in the social skills questionnaire at time points one and two are detailed in Tables 6 and 7. The potential score for each item is one to five (1= strongly agree and 5= strongly disagree). Minimum and maximum scores, means and standard deviations are provided for each item.

Table 6 Descriptive statistics of scores in social skills questionnaire at time point one

Item	N	Minimum	Maximum	Mean	Std. Deviation
Reacts appropriately if other kids tease him or say unkind things	8	3	4	3.50	.535
Asks to join in activities with other kids in an appropriate manner	8	2	4	2.75	.886
Gives compliments or says nice things to others when appropriate	8	2	4	3.13	.835
Asks permission before borrowing or using other people's things	8	1	5	3.00	1.309
Shares things with other kids his age	8	1	4	2.75	1.165
Asks other kids if he may join in their activities	8	2	5	3.38	1.061
Expresses affection or positive feelings to others	8	1	5	2.88	1.356
Invites others to join in games or activities	8	2	4	3.25	1.035
Takes part in social or sporting activities with other kids	8	3	5	3.62	.744
Takes part in conversations with adults	8	1	4	2.13	1.126
His tone of voice is appropriate.	8	2	4	3.13	.641
Laughs or smiles when appropriate	8	1	5	3.00	1.309
Takes part in conversations with other kids	8	2	4	3.25	.886
Shows that he is listening to others during conversations	8	3	5	3.88	.835
Stands up for himself appropriately if other kids act unreasonably	8	2	5	3.50	1.069

Notes:

1. Minimum indicates the minimum score for that item
2. Maximum indicates the maximum score for that item
3. Mean indicates the mean score for that item
4. Std. deviation indicates the standard deviation for that item

Table 7 Descriptive statistics of scores in social skills questionnaire at time point two

Item	N	Minimum	Maximum	Mean	Std. Deviation
Reacts appropriately if other kids tease him or say unkind things	8	3	4	3.62	.518
Asks to join in activities with other kids in an appropriate manner	8	1	4	2.50	1.195
Gives compliments or says nice things to others when appropriate	8	1	4	2.50	.926
Asks permission before borrowing or using other people's things	8	1	4	2.00	1.195
Shares things with other kids his age	8	1	4	2.38	.916
Asks other kids if he may join in their activities	8	1	4	2.88	1.126
Expresses affection or positive feelings to others	8	1	5	2.88	1.458
Invites others to join in games or activities	8	1	3	2.75	.707
Takes part in social or sporting activities with other kids	8	1	5	2.75	1.282
Takes part in conversations with adults	8	1	4	1.75	1.165
His tone of voice is appropriate.	8	1	4	3.38	1.061
Laughs or smiles when appropriate	8	1	5	2.50	1.309
Takes part in conversations with other kids	8	2	4	3.00	.535
Shows that he is listening to others during conversations	8	2	5	3.38	.916
Stands up for himself appropriately if other kids act unreasonably	8	2	5	3.38	1.061

Notes:

1. Minimum indicates the minimum score for that item
2. Maximum indicates the maximum score for that item
3. Mean indicates the mean score for that item
4. Std. deviation indicates the standard deviation for that item

Between time points one and two, there was a reduction in the mean scores of twelve of the fifteen items in the questionnaire indicating a perceived improvement in these skills. There was an increase in the scores for two items and no change in one.

A WSR was used to compare the scores at time points one and two. There was a significant improvement in the skill “asks permission before borrowing or using other people’s things” ($z = -1.994$, $p = 0.046$, 2-tailed). Although there were lower mean ratings in a further eleven skills, the z values in the WSR test did not reach statistical significance.

Given the small sample size in this study ($n=8$), with the increased likelihood of type II errors, it was decided to calculate effect sizes. The formula recommended by Glass, McGaw and Smith (as cited in Cohen et al., 2007, p. 521) was adopted for this purpose:

$$\frac{\text{mean of experimental group} - \text{mean of control group}}{\text{standard deviation of control group}}$$

Time points one and two were deemed to be analogous to the control and experimental groups respectively. Effect size was calculated by finding the difference between the means at the two time points and dividing by the standard deviation at time point one. Using the criteria for interpretation of effect size outlined in section 3.1, there was a strong effect size for “takes part in social or sporting activities with other kids” ($d = -1.17$) suggesting an improvement in this social skill between time points one and two. There were moderate effect sizes for “gives compliments or says nice things to others when appropriate” ($d = -0.75$), “asks permission before borrowing or using other people’s things” ($d = -0.76$), and “shows that he is listening to others during conversations” ($d = -0.60$).

3.3 Reunion Meeting

3.3.1 Students' Responses

Question 1 What has helped you in the transition from primary to secondary school?

The six students' responses to this question were collated and subject to content analysis (section 2.3). This process resulted in the identification of six categories (Table 8). Each participant in each pair was provided with fifteen stickers giving an indication of the relative importance of each point. The total number of stickers allocated to each category was calculated (Table 8).

Table 8 What has helped you in the transition from primary to secondary school?

Category	No. of stickers
Programme activities	36
Personal benefits	15
Meeting other people with ASD	9
Meeting people in general	8
Support from external professionals	7
Transition information	6

Based on allocated stickers, programme activities was construed as being the most helpful factor in the transition from primary to secondary school. This category included the sub-categories of 'relaxation' (17 stickers), 'games' (12 stickers) and 'timetables and checklist' (7 stickers). Ranked second category, based on number of allocated stickers, was personal

benefits. Sub-categories included 'made transition easier', 'killed bad habits' and 'more help with dealing with bullies'.

Question 2 What else could have helped you in the transition from primary to secondary school?

There were twenty responses to this question. Content analysis resulted in three identified categories plus a miscellaneous category. The majority of responses (thirteen) were grouped under the category 'programme activities' e.g. "more games", "more relaxation", "more fun". 'Transition information' and 'timing issues' were the other two categories.

Question 3 Looking ahead to the next 3 months, what else could help you during the transition period?

Three categories including miscellaneous emerged. The two main categories were 'general school support' (four responses) and 'others understanding of ASD' (two responses). In relation to the former, there were references to "buddies" "getting help if you failed a test" and "more SENs in mainstream to help get through work quicker". In relation to the latter, there were two comments "let people know you have Asperg syndrome" and "something about my Asperger Syndrome that will help people I know understand it or understand me more".

3.3.2 Parents' Responses

Question 1 What has helped your son in the transition from primary to secondary school?

The six parents' responses to this question were collated and subject to content analysis (section 2.3). This process resulted in the identification of five categories including miscellaneous (Table 9). Each participant in each pair was given fifteen stickers enabling an indication of the relative importance of each point. The total number of stickers allocated to each category was calculated (Table 9).

Table 9 What has helped your son in the transition from primary to secondary school?

Category	No. of stickers
Transition information	35
Transition group support	30
General school support	18
Miscellaneous	3
Meeting other people with ASD	1

Based on allocated stickers, 'Transition information' was construed as being the most helpful factor in the transition from primary to secondary school. This category included such comments as "knowing where he was going to school" (8 stickers), "knowing who the teachers would be (6 stickers), and "arranging extra visits before starting secondary" (6 stickers). Ranked second category, based on number of allocated stickers, was 'transition group support'. Topics included "meeting with other kids/parents in same

situation through transition group “(11 stickers) and “feeling of support from other parents and staff “(6 stickers).

Question 2 What else could have helped your son in the transition from primary to secondary school?

There were eleven responses to this question. Content analysis resulted in five categories including miscellaneous. In descending order of number of statements subsumed within each category, these were ‘transition information’, ‘general school support’, ‘identification of secondary school’, and ‘timing issues’.

Question 3 Looking ahead to the next 3 months, what else could help your son during the transition period?

There were six responses which were grouped under three categories, namely, ‘transport issues’, ‘information sharing’ and ‘social opportunities’. Grouped under the latter category were suggestions for “additional after school and lunchtime clubs”and “social events to enable them to integrate and get to know each other in a fun environment”.

3.4 Follow-up interviews

3.4.1. Parent interviews

Nine parents, representing eight young people, were interviewed at home. For the purposes of this report, data from the joint interview is taken to be equivalent to one parental response. The first section of the interview focused on the parents’ perspectives of their children’s social functioning in

secondary school. The second section considered their views of the move from primary to secondary school. Finally, sections three and four looked at the transition programme, both in terms of helping the young people make the transition and in providing parental involvement and support.

3.4.1.1 Social functioning in secondary school

The results of the content analysis of the responses to questions one to eight in section one are presented in tables 10 to 16 that follow. It was decided to combine the data from questions seven and eight as there appeared to be considerable overlap in the categories generated. The term “frequency” in each of the tables in section 3.4 indicates the number of parents who made comments which were allocated to a particular category.

The first question explored parents’ perspectives of their children’s relationships with classmates. As outlined in section 2.4, an inductive process was used to generate categories. Ten categories emerged from responses to question one (Table 10).

Table 10 How does he get on with his classmates?

Category	Frequency
Getting on OK/fine/well	4
Made friends	3
There to amuse them	1
Mixing better with girls	1
Likes	1
Dislikes	1
Plays with them	1
Doesn't play with them	1
Difficulty understanding differences from classmates	1
Difficulty accepting differences from classmates	1

Half of the parents referred to their children as 'getting on OK/fine/well' with their classmates and three of the parents commented that their sons had made friends with some of their classmates.

Question two in section one explored parents' perspectives of their children's relationships with students in other classes. Nine categories were generated from the responses to this question (Table 11).

Table 11 How does he get on with other students in the school?

Category	Frequency
Disagreements/fights	1
Doesn't mix	1
Bullied	1
Made friends	1
Walks to school with group of students	1
Mixes	1
Shared interests	1
Getting on OK/ fine/well	1
Some have upset him	1

Five of the categories could be construed as suggesting positive evaluations of peer relationships, namely 'made friends', 'walks to school with group of students', 'mixes', 'shared interests' and 'getting on OK/fine/well'. There was one comment allocated to each of these categories. In contrast, four of the categories, each receiving one comment, suggested negative evaluations of these social relationships.

The third question explored parents' perspectives of their children's relationships with teachers in their classes. Thirteen categories emerged from the responses to this question (Table 12).

Table 12 How does he get on with teachers in his classes?

Category	Frequency
Getting on OK/fine/well	6
Positive comments about teachers	3
Likes teachers with sense of humour	2
Not getting on fine/ well	2
More relaxed	1
Gets to do things he volunteers for	1
Relates to teachers	1
More confident	1
Trust	1
Mutual respect	1
Student overcritical of self	1
Difficulty accepting help	1
Pushes himself too hard	1

Six of the parents referred to their children as 'getting on OK/fine/well' with teachers in their classes. The remaining two parents provided a negative evaluation of the relationship. A couple of the parents referred to their children liking teachers with a sense of humour.

Question four explored parents' perspectives of their children's relationships with other adults in their classes. Eight categories were generated from the responses to this question (Table 13).

Table 13 How does he get on with other adults in his classes?

Category	Frequency
Getting on fine/well	2
Humour/laugh	1
Likes other adults	1
Doesn't rate them	1
Difficulty asking for help	1
More confident	1
Feels relaxed	1
Difficulty accepting help	1

The majority of categories had one comment. Five of the categories, accounting for six out of a total of nine comments, were phrased in positive terms. These were 'getting on fine/well', 'humour/laugh', 'likes other adults', 'more confident' and 'feels relaxed'.

The fifth question explored parents' perspectives of their children's relationships with other teachers in the school. Four categories were generated from the responses to this question (Table 14).

Table 14 How does he get on with other teachers in the school?

Category	Frequency
Difficulty understanding teacher's actions	1
Knows he can go to them for help	1
Talks to them	1
Likes specific teachers	1

Three of the four categories could be construed as indicating positive evaluations of relationships with teachers, namely 'knows he can go to them for help', 'talks to them', and 'likes specific teachers'. Only one comment, in the category 'difficulty understanding teacher's actions', could be interpreted in a negative fashion.

The students' relationships with non-teaching staff in the school, who do not provide direct in-class support, were explored in question six. Three categories emerged from the responses to this question (Table 15).

Table 15 How does he get on with other adults in the school?

Category	Frequency
Helped student	1
Polite manner towards the adults	1
Doesn't like to ask in dinner hall	1

Two of the three categories, each receiving one comment, could be construed in positive terms. One referred to the help provided to the student and the other referred to the student's behaviour towards these adults.

The remaining two questions in section one explored the students' behaviour at break times and lunchtimes. Twelve categories emerged from analysis of comments (Table 16).

Table 16 **What does he do at break times and lunchtimes at school?**

Category	Frequency
With others	7
Clubs	6
Dining area	6
Playground	3
Support area (unit, SfL, guidance)	2
On own	2
Library	1
Friend's house	1
Shops near school	1
School grounds	1
Plays football	1
Hall area	1

The twelve categories appear to fall into three broad themes, namely the location; the type of activity; and whether the student was on his own or in the company of others. In relation to location, seven of the eight parents referred to the 'dining area' and three mentioned the 'playground'. Six of the parents noted that their children attended clubs. Seven of the parents said that the boys were with others at break times and lunchtimes while two referred to a tendency to be on their own. It should be noted that one of the parents referred to both patterns of behaviour.

3.4.1.2 Transition from primary to secondary school

Section two of the interview explored parents' perspectives of the move from primary to secondary school. The results are presented in tables 17 to 19.

Question nine considered how the young people viewed secondary school prior to the transition. Fourteen categories emerged from participants' responses to this question (Table 17).

Table 17 When your son was at primary school, what did he imagine secondary school would be like?

Category	Frequency
Scary	2
More teachers	2
Maze of corridors	1
More classes	1
Big	1
Get head shoved down toilet	1
Would be like primary school	1
Positive expectations	1
Teachers would shout	1
Concerned about crowds of people	1
Might get lost	1
Harder work	1
Better facilities	1
Might get bullied	1

The majority of the categories could be construed in negative terms. These could be grouped into five themes, namely the size and layout of the school; relationships with teachers; peer relationships; level of work; and the school facilities. Two of the categories, each receiving one comment, appear to

provide either positive or neutral expectations of secondary school. These are 'positive expectations' and 'would be like primary school'.

Question ten in section two explored parents' perspectives of their children's evaluation of secondary school. Twelve categories emerged from the responses to this question (Table 18).

Table 18 How does secondary school compare to his expectations of it?

Category	Frequency
Better than expected	3
Likes it	2
Primary school static in comparison	1
Talks about what he enjoys in subjects	1
Worse than expected	1
Likes moving from class to class	1
Sometimes apprehensive	1
Happy	1
Likes variety	1
Amount of homework less than expected	1
Work easier than expected	1
Support of unit	1

The majority of the comments were positive. Three of the parents thought their children perceived secondary school as 'better than expected' and two parents said their children liked it.

Children's feelings about the transition from primary to secondary school were explored in question eleven. Four categories emerged from the responses to this question (Table 19).

Table 19 What feelings did your son associate with the transition from primary to secondary school?

Category	Frequency
Nervous/scared/frightened	7
Looking forward to new school	4
Interested in activities in secondary school	2
Friends/peers at different school	1

Seven of the parents referred to feelings of 'nervous/scared/frightened'. Four of the participants referred to their sons as 'looking forward to new school' and two of the parents made specific reference to being 'interested in activities in secondary school'. Only one of the parents reported feelings associated with peers or friends being at a different secondary school.

3.4.1.3 Utility of transition programme

The results from question twelve, which explored the parents' perspectives of ways in which the programme helped their children make the move from primary to secondary school, are presented in table 20.

Seven categories were generated in an inductive fashion from the participants' responses (Table 20).

Table 20 In what ways (if any) did the transition programme help your son in the transition from primary to secondary school?

Category	Frequency
Being with peers with AS going through transition	6
Relaxation	2
Information on Asperger Syndrome	2
Interacting with different adults	1
Information about secondary school(e.g. timetable, maps, diaries)	1
Increased confidence	1
Talked to parent about programme activities	1

Six of the parents commented on the value of being with peers who were going through the same experience. Some of these comments included specific reference to the peers having Asperger Syndrome. References to 'relaxation' activities and 'information on Asperger Syndrome' each received two comments.

3.4.1.4 Involvement and support provided by transition programme

Questions thirteen and fourteen in section four of the interview schedule explored the parents' views of their involvement in the programme and the support provided. The results are presented in tables 21 to 22.

Parents' perspectives of the ways in which they were kept informed about the programme were explored in question thirteen. Five categories were generated in an inductive fashion from participants' responses to this question (Table 21).

Table 21 **What are your views about the ways in which you were kept informed about the programme?**

Category	Frequency
Positive evaluation	4
Liked the information provided	3
Initial meeting for parents was good	1
Diary system was good	1
Advance notice of parent meetings was good	1

All the categories could be construed in positive terms. Reference was made to the information provided, meetings with parents and the diary system.

Parents' perspectives of the opportunities to meet with other parents were explored in question twelve. Thirteen categories were generated in an inductive fashion from participants' responses to this question (Table 22).

Table 22 **What are your views about the opportunities you had to meet with other parents?**

Category	Frequency
Provided opportunity to get to know other parents	3
Timing of sessions was right	2
Would be welcome informal opportunities to meet with other parents	2
Would welcome more parent meetings	2
Amount of sessions was right	1
Wasn't much time to chat to other parents	1
Missed opportunity to deal with issues and share ideas other parents	1
Had difficulty attending meetings (child care)	1
Uncomfortable about discussing child with other parents	1
Provision of contact information (other parents) welcomed	1
Could be useful to have meetings without children	1
Feeling you are with parents who understand	1
Positive evaluation(not specific)	1

Six of the categories, accounting for half the comments, could be construed as providing positive evaluations of the opportunities provided to meet other parents. In contrast, two of the participants said that they 'would welcome informal opportunities to meet with other parents' and two 'would welcome more parent meetings'.

3.4.2 Student interviews

Eight students were interviewed, three of whom attended autism units based within two mainstream secondary schools, and five of whom attended mainstream secondary schools.

3.4.2.1 Social functioning in secondary school

The first section of the interview focused on the students' perspectives of their social functioning in secondary school.

The first question explored students' perspectives of their relationships with classmates. Six categories were generated in an inductive fashion from the responses to this question (Table 23).

Table 23 How do you get on with your classmates?

Category	Frequency
Getting on fine/well	7
Friendly to me	3
Feels secure	1
Annoyed by some classmates	1
Kind to me	1
Organising activity for class mates	1

The majority of young people saw themselves as 'getting on OK/fine/well' with their classmates. Three of the students viewed their peers as being 'friendly to me'.

Question two in section one explored students' perspectives of their relationships with students in other classes. Seven categories were generated in an inductive fashion from the responses to this question (Table 24).

Table 24 How do you get on with other students in the school?

Category	Frequency
Made friends	3
Not liked by other students	2
Getting on fine/well	2
Not as friendly	1
Disagreements with some other students	1
'Hassle' from some students (<i>pestering</i>)	1
Walk to school with other students	1

Three of the categories could be construed as suggesting positive evaluations of peer relationships, namely 'made friends', 'walk to school with other students', and 'getting on fine/well'. Three of the young people had 'made friends' and two were 'getting on fine/well'. In contrast, four of the categories, each receiving one or two comments, suggested negative evaluations of these social relationships.

The third question explored students' perspectives of their relationships with teachers in their classes. Twelve categories were generated from the responses to this question (Table 25).

Table 25 How do you get on with teachers in your classes?

Category	Frequency
Getting on OK/fine/well	6
Not getting on with teachers	2
Teachers helpful	2
Some teachers can be strict	1
Some teachers shout	1
Get into trouble for talking	1
Chatty in some classes	1
Act silly in some classes	1
Had 'punnies' (<i>punishment exercises</i>)	1
Student seen as charming	1
Student polite	1
Student seen as positive role model	1

Six of the young people were of the view that they were 'getting on OK/fine/well' with teachers in their classes. Two of the students referred to teachers being helpful. The remaining two students provided a negative evaluation of these relationships indicating that they were 'not getting on with the teachers'.

Question four in section one explored students' perspectives of their relationships with other adults in their classes. Two categories were generated from the responses to this question (Table 26).

Table 26 How does do you get on with other adults in your classes?

Category	Frequency
Adult helpful	3
Getting on fine/well	3

Both categories, each receiving three comments, could be construed in positive terms. One was a general evaluative category about 'getting on fine/well' with adults and the other made specific reference to adults being perceived as helpful.

The fifth question explored students' perspectives of their relationships with other teachers in the school. Four categories were generated from the responses to this question (Table 27).

Table 27 How do you get on with other teachers in the school?

Category	Frequency
Getting on fine/well with them	3
Teacher helpful	1
Talk to them	1
Teacher tells you off	1

Three of the four categories could be construed as indicating positive evaluations of their relationships with teachers, namely 'getting on fine/well with them', 'teacher helpful' and 'talk to them'. Only one comment, in the category 'teacher tells you off', could be interpreted in a negative fashion.

The students' relationships with non-teaching staff in the school, who do not provide direct in-class support, were explored in question six. Four categories emerged from the responses to this question (Table 28).

Table 28 How do you get on with other adults in the school?

Category	Frequency
Getting on fine/well	6
Ask for help (e.g. lost something)	1
Talk to them	1
Share jokes	1

All of these categories could be construed in positive terms. Six of the students perceived that they were 'getting on fine/well' with other adults in the school.

The remaining two questions in section one explored what the young people did during break times and lunchtimes. Twelve categories emerged from analysis of comments (Table 29).

Table 29 **What do you do at break times and lunchtimes at school?**

Category	Frequency
Talk to people	7
With others	7
Dinner hall	6
Clubs	5
Outside	4
Play games	2
Social area	2
Shops near school	2
Hall	1
Classrooms	1
Support area (e.g. Unit, SfL, guidance)	1
Playground	1

The twelve categories appear to fall into three broad groupings, namely the location; the type of activity; and whether the student was on his own or in the company of others. In relation to location, six of the eight students referred to the 'dining area' and four talked about going 'outside'. With regard to activities, 'talk to people' was mentioned by the majority of students. The next most frequent category was 'clubs', being mentioned by five of the boys. Seven of the young people said that they were with others at break times and lunchtimes. None of them talked about being on their own.

3.4.2.2 Transition from primary to secondary school

Section two of the interview explored students' perspectives of the move from primary to secondary school. The results are presented in tables 30 to 32.

Question nine explored what the students imagined secondary school would be like. Six categories were generated in an inductive fashion from participants' responses to this question (Table 30).

Table 30 When you were at primary school, what did you imagine secondary school would be like?

Category	Frequency
Difficulty finding classes/getting lost	2
People who would tease	1
Big	1
Hard work	1
Stricter teachers	1
Would not fit in	1

There were only seven comments from the eight students who were interviewed. These appeared to be negative in tenor, although 'big' could be interpreted in a variety of ways.

Question ten in section two explored the students' evaluation of secondary school. Eleven categories emerged from the responses to this question (Table 31).

Table 31 How does secondary school compare to your expectations of it?

Category	Frequency
Better than expected	4
Easy to find way around school	2
Worse than expected	1
As expected	1
Dislikes teachers	1
Teachers nicer than expected	1
Dislikes work	1
Work easier	1
Looks different	1
Dislikes type of people who attend	1
Fitted in	1

Half of the young people saw secondary school as being 'better than expected'; one boy described it as being 'worse than expected' and one referred to it as being 'as expected'. Specific references were made to the teachers; the nature of the school work, the physical appearance of the school; and the type of students who attend.

Finally, the young people's feelings about the transition from primary to secondary school were explored in question eleven. Ten categories emerged from the responses to this question (Table 32).

Table 32 **What feelings do you associate with the transition from primary to secondary school?**

Category	Frequency
Nervous/frightened	5
Not seeing peers/friends from primary school	2
Not knowing where to go in new school	2
Missing primary school	1
Wider range of activities	1
Fun	1
Excited	1
Feeling welcomed	1
Support of the unit	1
Not mentally stimulating	1

Five of the participants made reference to feeling ‘nervous/ frightened’ about the move to secondary school. Two of the young people referred to feelings about not seeing peers from primary school and their friends going to a different school. However, a few of the comments suggested that there were positive feelings associated with the move, such as ‘fun’, ‘excited’, ‘feeling welcomed’ and a ‘wider range of activities’. One of the participants who attended a unit within the school made reference to positive feelings about the support it provided.

3.4.2.3 Utility of transition programme

Question twelve in section three explored the young people's perspectives of the ways in which the programme helped them with the move from primary to secondary school.

Eleven categories were generated in an inductive fashion from the participants' responses (Table 33).

Table 33 In what ways (if any) did the transition programme help you in the transition from primary to secondary school?

Category	Frequency
Relaxation	5
Coping with the stress of the move to secondary	2
Games	2
Information about secondary school(e.g. timetable, maps, diaries)	1
Help with the work in secondary school	1
Help with making friends	1
Body language	1
Puzzles and 'goo' stuff (<i>OT session</i>)	1
Increased confidence	1
Have a laugh with people	1
Being with peers who are intelligent and mature	1

Five of the students made reference to the benefits of the relaxation activities provided during the sessions. Two of the students commented that the programme had helped them cope with the stress of the move from primary

to secondary school. The fun element of the sessions was reflected in references to 'games' and 'have a laugh with people'.

3.4.3. Secondary school staff interviews

Eight staff members from four secondary schools participated in the interviews which related to seven students, three of whom attended autism units and four of whom attended mainstream secondary schools. Staff members participating included a principal teacher managing an autism unit (two students); a link teacher for an autism unit (one student); a pupil support assistant (one student); a principal teacher, pastoral care (one student); a support for learning teacher and a principal teacher, pastoral care (one student); and a support for learning teacher (one student). For convenience, the generic term 'teachers' will be used throughout this section when referring to the interviewees.

3.4.3.1 Social functioning in secondary school

The interview focused on the teachers' perspectives of the children's social functioning in secondary school.

The first question explored teachers' perspectives of the students' relationships with classmates. Seventeen categories were generated in an inductive fashion from the responses to this question (Table 34).

Table 34 How does the student get on with his classmates?

Category	Frequency
Makes inappropriate comments to classmates	3
Has friends	3
Doesn't actively participate	2
Overreacts to situations	2
Quiet demeanour	2
Cooperative	2
Moody	1
Anti other students	1
Tolerates other students	1
Disinterest in other students	1
Expects to be included in group and upset if excluded	1
Can misperceive things	1
Disagreements with other students	1
Popular	1
Likes mixed gender groups	1
Happy demeanour	1
Sense of humour/sharing jokes/funny	1

Looking at the highest ranking, shared by two categories, the category 'has friends' could be construed as providing a positive evaluation of peer relationships whereas the category 'makes inappropriate comments to classmates' is more negative. Looking at the next highest ranking, shared by four categories, two categories provide a negative evaluation. These are 'doesn't actively participate' and 'overreacts to situations'. One of the

categories 'cooperative' is positive and 'quiet demeanour' could be construed in a variety of ways.

Question two in section one explored teacher' perspectives of students' peer relationships with students in different classes. Six categories were generated in an inductive fashion from the responses to this question (Table 35).

Table 35 How does the student get on with other students in the school?

Category	Frequency
Relates to other students	3
Doesn't relate to other students	2
Teased by other students	2
Anxious	1
Kind to other students	1
Has friends	1

Three of the categories, accounting for five comments, could be construed as providing positive evaluations of peer relationships. These were 'relates to other students', 'kind to other students', and 'has friends'. In contrast, three of the categories, accounting for five comments, suggested negative evaluations of these relationships.

The third question explored teachers' perspectives of students' relationships with teachers in their classes. Sixteen categories were generated from the responses to this question (Table 36).

Table 36 How does the student get on with teachers in his classes?

Category	Frequency
Responds well to teacher	3
Polite/respectful	2
Unacceptable behaviour	2
Immature behaviour	2
Quite arrogant	1
Cooperates with teacher	1
Doesn't cooperate with teacher	1
Avoids going to class	1
Student has toughened up	1
Loud in classes	1
Likes subject	1
Doesn't speak to teacher	1
Likes teachers sense of humour	1
Student will do what he is told	1
Anxious	1
Overexcited	1

The highest ranked category was 'responds well to teacher'. The second highest ranking was shared between 'polite/respectful' (two comments), 'unacceptable behaviour' (two comments), and 'immature behaviour' (two comments). Overall, there appears to be a rather mixed picture of positive and negative evaluative comments.

Question four in section one explored teachers' perspectives of students' relationships with other adults in their classes. Eight categories were generated from the responses to this question (Table 37).

Table 37 How does the student get on with other adults in his classes?

Category	Frequency
Appropriate behaviour	2
Sense of humour	2
Really straight (<i>lack of subtlety</i>)	1
Sense of outrage (<i>anger</i>)	1
Responds to adults	1
No sense of hierarchy	1
Follows instructions	1
Lack of emotional response	1

Four of the categories, each receiving one or two comments, could be construed in positive terms. These were 'appropriate behaviour', 'sense of humour', 'responds to adults' and 'follows instructions'. Three of the categories, each receiving one comment, provided more negative evaluations. These were 'sense of outrage', 'no sense of hierarchy' and 'lack of emotional response'.

The fifth question explored students' relationships with other teachers in the school. Five categories were generated from the responses to this question (Table 38).

Table 38 How does the student get on with other teachers in the school?

Category	Frequency
Student respects teacher	1
Disinterest in teacher	1
Doesn't initiate interactions	1
Student waits for others to make decisions	1
Responds to praise	1

Two of the categories could be construed as indicating positive evaluations of the students' relationships with teachers who were not in their classes. These were 'student respects teacher' and 'responds to praise'. The other three categories, each receiving one comment provided more negative evaluations.

The students' relationships with non-teaching staff in the school, who do not provide direct in-class support, were explored in question six. Three categories emerged from the responses to this question (Table 39).

Table 39 How does the student get on with other adults in the school?

Category	Frequency
Gets on fine/well	2
Student's disinterest in other adults	1
Dismissive of auxiliaries outside class	1

Two of the teachers referred to the student as 'gets on fine/well' with other adults in the school. In contrast, there were references to particular students showing 'disinterest in other adults' and being 'dismissive of auxiliaries outside class'. However, there were few comments of this nature.

The remaining two questions in section one explored what the young people did during break times and lunchtimes. Eleven categories emerged from analysis of comments (Table 40).

Table 40 What does the student do at break times/lunchtimes?

Category	Frequency
Clubs (chess, film)	5
Dining area	5
Student with others	5
Unit/area near unit	2
Lobby area	2
Corridors	1
Quadrangle	1
Playground	1
Music base	1
Student on own	1
Street area	1

The eleven categories appear to fall into three broad groupings, namely the location; the type of activity; and whether the student was on his own or in the company of others. In relation to location, five of the eight teachers

referred to the 'dining area'. With regard to activities, participation in 'clubs' was mentioned by five of the teachers. Five of the teachers said that the students were with others at break times and lunchtimes. Only one teacher commented that a particular student tended to be on his own at these times.

4 Discussion

4.1 How do the students' anxiety levels immediately prior to transfer compare with those following transfer?

Initial analysis of the data from the anxiety questionnaire focused on comparison of group mean scores for each of the items. Between time points one and two, there were lower mean scores in eleven of the twenty-six items. A moderate effect size for time was found in two of these items. This result is in line with findings from a previous study into students' anxiety levels following transfer to secondary school (Lohaus, Ev Elben, Ball & Klein-Hessling, 2004). However, the other results provided conflicting evidence as there was an increase in the mean scores for ten items and no change in five items.

Lohaus et al. (2004) drew attention to individual differences in children's responses to transition, both between years and moving schools. In contrast to the general trend towards a reduction in stress levels following school transfer, around 30-40% of children provided "more negative self-descriptions after this period" (p.172).

In this study, further analysis of the data concentrated on individuals' scores before and after transition to secondary. Anxiety levels were measured against those of young people drawn from the general population (Spence, 1997; Spence et al., 2003). Prior to the summer break, five of the students had one or more sub-scale scores which were significantly higher than the

test norms (Spence, 1997; Spence et al., 2003). Following transfer, four of the students had one or more sub-scale scores which were significantly higher. These results provide some evidence of a slight reduction in anxiety levels post transfer.

Nevertheless, the findings lend further support to previous research which has found higher levels of anxiety in students with Asperger Syndrome compared with those in the general student population (Gillott et al., 2001). At both time points, only two of the students evidenced anxiety levels in the four sub-scales which were within the standard norms (Spence, 1997; Spence et al., 2003). Following school transfer, half of the students continued to have scores in one or more sub-scales which were significantly higher than those found in these studies.

Comparison of individual scores across the four sub-scales revealed some interesting trends. Based on those scores which were significantly higher than the norms, there was evidence of a decrease between the two time points in two of the sub-scales but an increase in the 'physical injury fears' sub-scale. In the literature, concerns have been expressed about the internal consistency of the 'physical injury fears' sub-scale when used with a normal adolescent sample (Muris, Merckelbach, Ollendick, King & Bogie, 2002). These researchers found a Cronbach alpha level of 0.54 for the physical injury fears sub-scale. Spence et al (2003), with a younger 'community' adolescent sample, found a coefficient alpha of 0.6, which was deemed to be acceptable. Kline (as cited in Clark-Carter, 2004) has recommended that

alpha levels should be around 0.9 and not below 0.7. This could raise questions as to the reliability of this sub-scale. However, in the current study the coefficient alpha was 0.75 which is considered reliable (Cohen et al., 2007). The relatively low alpha level of the 'physical injury fears' sub-scale in some studies has been attributed to having few items (five) and their heterogeneous nature (Muris et al., 2002). On balance, research opinion is towards retention of the sub-scale as an important dimension of anxiety in children and adolescents (Nauta, 2005; Spence et al., 2003).

4.2 How do the students' social skills immediately prior to transfer compare with following transfer?

Analysis of the data from the social skills questionnaires completed by the eight parents focused on the comparison of group mean scores for each of the fifteen items. Between time points one and two, there were lower mean scores in twelve of the fifteen items suggesting a perceived improvement in these skills. There was an increase in the scores for two items and no change in one.

The WSR test was used to compare the scores at time points one and two. Of the twelve items showing improvement over time, one reached statistical significance. This was "asks permission before borrowing or using other people's things". Given the small sample in this study, it was decided to calculate effect sizes. A strong effect size for time was found for one of the items, "takes part in social or sporting activities with other kids". A moderate effect size for time was found in a further three items, "gives compliments or

says nice things to others when appropriate”, “asks permission before borrowing or using other people’s things” and “shows that he is listening to others during conversations”.

These analyses provide evidence that the students’ social skills improved over the timescale of the study. Unfortunately, the author has not sourced previous studies for comparative purposes. These findings could form the basis for future research into the social skills of student with ASD making the transition from primary to secondary school.

In relation to the impact of the transition programme on students’ social skills, it is not possible to draw any firm conclusions. The SSQ-P questionnaires were completed over a period from half way through the programme to just after its completion. Thus, there was no measurement of social skills at pre- and post- intervention time points. A previous report by the author used a developed transition questionnaire to compare changes in the social interaction, social reasoning, social communication and friendship skills of the students (Hannah, 2007). This questionnaire had been designed to provide a measure of change in observable skills over a short period of time. This decision was partly based on the lack of research evidence as to the sensitivity of the SSQ questionnaires to detect changes over a short period of time. The extension of the transition programme over a longer time period incorporating more sessions could allow for the use of standardised measurement instruments such as the SSQ.

4.3 What are the students' perspectives of the transition from primary to secondary school?

The activities undertaken at the October reunion meeting provided information on three aspects. Firstly, the students' evaluation of transition support mechanisms and strategies; secondly, ways in which the process could be improved; and thirdly, additional support that would be welcomed over the next three month period.

The value placed on the transition programme activities is discussed in section 4.5. The importance of being given timely information about the secondary school and starting the process earlier was highlighted in perceived ways to improve the process. From this writer's knowledge of the resource allocation system within the authority, these comments could be attributed to resource decisions being finalized in the May prior to school transfer i.e. after the programme had commenced. Additional resources (classroom assistants); support systems (school buddies); and raising awareness of ASD (other students) were noted in responses to the question about further help which could be provided in the next few months.

The follow-up interviews in the Spring Term of first year were used to elicit students' recollections of what they thought secondary school would be like; their evaluations of secondary school; and the feelings associated with the move. Perceptions prior to the move were negative in tenor. Students expressed concerns about getting lost, being teased, having stricter teachers

and getting harder work. The findings from this study resonate with those from previous research into the perceptions of students making the transition to secondary school. Concerns about physical and organisational aspects of secondary school, such as the size of the school, getting lost and finding their way between classes, have been articulated by researchers focusing on the experiences of students in general (Akos, 2004, Johnstone, 2001; Ward, 2000) and those with ASD (Johnstone & Patrone, 2003; Douglas, 2002). Students' worries about academic and curricular aspects such as the difficulty of the work set have been reported for students in general (Graham & Hill, 2003) and students with ASD (Johnstone & Patrone, 2003). Anxieties related to social aspects of the move such as being picked on and being separated from friends have been reported in studies with the general student population (Graham & Hill, 2003; Johnstone, 2001) and those with ASD (Douglas, 2002).

Overall, there was a positive evaluation of the experience of secondary school compared to prior expectations with only one student saying it was worse than expected whereas four said it was better than expected. In terms of specific aspects of secondary school life, two of the participants said it was easy to get around; and there were mixed comments about the nature of the work and the teachers.

The most common feelings associated with the move to secondary school were anxiety and fear. Concerns about social aspects of the move were reflected in references to not being with peers or friends in the new school.

Such feelings of anticipatory anxiety have been reported in other research involving the general student population (Pratt & George, 2005; Lucey & Reay, 2000).

Lucey and Reay (2000) view anxiety in a positive light seeing it as being necessary to the growth and development of the 'self' through helping the individual adapt to difficult circumstances and new experiences. Whether anxiety serves a similar function for students with ASD is not known and would be worthy of further research.

Some of the comments made by the students in this study indicated feelings of excitement and enjoyment of the new experience. This combination of feelings of anxiety and fear mixed with those of excitement has been reported by other researchers. Lucey and Reay (2000) use the term 'fearful excitement' to describe this mix of emotions.

4.4 What are the parents' perspectives of the transition from primary to secondary school?

Six parents participated in a group activity at the October reunion meeting providing some insight into their perspectives of the transition process. Parents placed most emphasis on 'transition information'. This category encapsulated knowledge of the secondary school, information on new teachers, and orientation visits. The transition programme was valued as one element of the transition process (see section 4. 6). These views are similar

to those of parents of children with ASD in the Johnstone and Patrone (2003) study. Reported strategies which helped the transition process included visits to the new school and having teachers from the new school coming to see their child.

Transition information also featured strongly in relation to the question “What else could have helped your son in the transition from primary to secondary school?” Identification of the secondary school to be attended and timing issues were other areas where improvements were suggested. These comments resonate with those from another study which explored the views of parents of children with ASD making the transition to a new school, although not necessarily from primary to secondary. Parents in the Johnstone and Patrone (2003) study commented on difficulties associated with the identification of the next school placement.

The provision of social opportunities, such as after school and lunchtime clubs, to help the boys integrate and get to know each other better was suggested in response to the question “Looking ahead to the next 3 months, what else could help your son during the transition period?”

Interviews with parents in the Spring Term provided a further opportunity to explore their perspectives of the transition from primary to secondary school. They referred to a number of concerns held by their children prior to the move. Reported concerns could be grouped into five themes, namely the size and layout of the school; relationships with teachers; peer relationships; level

of work; and the school facilities. In terms of the actual experience of secondary and how that compared with prior expectations, these were largely positive. Finally, the most common feelings associated with the move were those of anxiety and fear. However, to balance that, half of the parents reported that their sons had positive anticipatory feelings.

4.5 How do the students view the utility of the transition programme?

The group activity undertaken at the October reunion meeting gave the students an opportunity to evaluate the relative merits of the transition programme in relation to established transition practices. Students valued the programme activities, making specific reference to the helpfulness of the relaxation sessions, the games, the timetables and checklists. In response to the question “What else could have helped you in the transition from primary to secondary school?” participants recommended more of these preferred activities.

An interesting finding was the value placed on the opportunity to meet other students with ASD, and the chance to discuss ASD with them. This suggests that the young people recognized some of the social benefits of participation in the programme and the opportunities to gain further insight into the implications of ASD. The Good Childhood Enquiry (Children’s Society, 2007) has elicited the views of children and young people about a number of aspects of childhood including friendships and peer relationships. Evidence from the findings to date support the value placed on friendships. Having

“friends that are similar to themselves” (p.4) was an important quality. The young people participating in the programme appreciated being given the space and time to be with others like them who were going through a similar experience.

One of the difficulties with the categorization system was a difficulty in teasing out the relative contribution of the transition programme in some of the categories. For example, the category ‘transition information’ includes the sub-categories ‘learning about the move’ and ‘going to induction days’. The former could be attributed to the programme plus additional sources of information. Induction days are a common feature of transition arrangements for all students. Students in this study participated in planned induction days. There is evidence from parents’ comments that the students were provided with additional orientation visits although these were not mentioned by the students.

The follow-up interviews in the Spring Term of first year provided an opportunity for the students to reflect on the perceived benefits of the transition programme. Opportunities to practice relaxation were valued by five of the eight students. Unfortunately, there is no evidence of the extent to which relaxation was practiced either outwith the sessions or whether it continued beyond the duration of the programme.

This observation is interesting in the context of recent research by Bellini (2006) into the development of social anxiety in adolescents with ASD. The

author proposes a developmental pathways model to explain the complex relationships between physiological arousal, social skills deficits and social anxiety. This is used as the basis for the identification of predisposing and protective factors and recommendations for clinicians. Bellini (2006) stated that “because the presence of elevated physiological arousal may increase the likelihood of being adversely conditioned by negative peer interactions, it is essential that children and adolescents with ASD learn arousal regulation or relaxation skills” (p. 143).

Two of the students made specific reference to ways in which participation in the transition programme helped lower their anxiety levels in relation to the move to secondary school:

Student 1: “They taught us how to cope with this extremely important move. How to deal with the stress of it all.”

Student 2: “Made things a bit more calming-more relaxing. Relaxed about moving.”

4.6 How do the parents view the utility of the transition programme?

In contrast to their children’s emphasis on the nature of the activities and their perceived benefits, at the October reunion meeting activity, parents placed more emphasis on social aspects of the transition programme. ‘Transition group support’ was ranked second after ‘transition information’ in

terms of helping their children in the transition process. Specifically, they valued meeting other parents and young people going through the same experience; and the feeling of support from other parents and staff involved in the programme.

The follow-up interviews in the Spring Term provided an opportunity for the parents to reflect further on the perceived benefits of the transition programme for their children and themselves. A majority of the parents commented on the importance and value of their children being with peers going through a similar experience. Some made specific reference to the peers having Asperger Syndrome. A quarter of the parents commented on the benefits of the relaxation component.

Parents provided a positive evaluation of the ways in which they had been kept informed about the programme. They were also positive about the opportunities they had to meet with other parents. However, a minority of the parents suggested either more formal meetings and/or informal opportunities to meet up with other parents such as a chat over a cup of coffee. The author had hoped that the formal meetings would have provided a forum to facilitate the development of such informal links although this was not an explicit aim of the programme and was not subject to evaluation. There was some, albeit limited evidence, of such developments. For example, one of the parents mentioned that she had had some contact with another parent.

4.7 What are the students' perspectives of their social functioning in school following transfer?

Students' perspectives of their social functioning were explored in interviews conducted approximately six months following the move to secondary school.

With regard to peer relationships, the overall picture appeared to be positive. Seven of the eight students commented that they were 'getting on fine/well' with their classmates, with three describing classmates as being 'friendly to me'. With regard to students in other classes and year groups, three of the students said they had 'made friends' with them.

There were some references to difficulties with other students in the school, either in other classes or other year groups. These included comments about getting hassle, not being liked and having disagreements. These findings would suggest that the students perceived themselves as getting on better with their classmates compared with other students in the school.

Relationships with teachers were perceived as largely positive with six of the students stating they were 'getting on OK/fine/well'. Two of the students provided a negative evaluation. Similarly, relationships with other adults, including classroom assistants, janitors and dinner ladies, were viewed in positive terms.

At break times and lunchtimes, the majority of the students were in the company of their peers. Talking to people was the most frequently

mentioned activity. Participation in clubs was the second highest ranked activity based on frequency of comments. Most of the students dined in the school although two of the students mentioned that they went out to shops near the school.

4.8 What are the parents' perspectives of their children's social functioning in school following transfer?

Parents' perspectives of their children's social functioning were explored in interviews conducted approximately six months following the move to secondary school.

With regard to peer relationships, the overall picture appeared to be positive. Half of the parents felt their children were 'getting on OK/fine/well' with classmates with three parents describing their children as having 'made friends'. There were a few negative comments about disliking classmates, not playing with classmates, and having been upset by other students in the school. Difficulties understanding or accepting differences from classmates were reflected in two comments.

Relationships with teachers were perceived as largely positive with six of the parents referring to their children as 'getting on OK/fine/well' with their teachers. Similarly, relationships with other adults, such as classroom assistants, were viewed in positive terms.

At break times and lunchtimes the majority of the students were in the company of peers. Participation in clubs was the most frequently mentioned activity. Most of the students dined in the school although one of the students went out to shops near the school.

4.9 What are the secondary school staff members' perspectives of their students' social functioning in school following transfer?

Teachers' perspectives of their students' social functioning in school were explored in interviews conducted approximately six months following the move to secondary school.

With regard to peer relationships, the picture was quite mixed. Three of the teachers reported that the students had 'made friends' with their classmates and two described them as being 'cooperative'. In contrast, there were references to 'makes inappropriate comments to classmates' (three comments), 'doesn't actively participate' (two comments) and 'overreacts to situations' (two comments). Relationships with students in other classes and year groups provided a similar mixed picture with 'relates to other students' (three comments) and 'doesn't relate' (two comments). Two of the teachers were aware that the students had been subjected to teasing.

Relationships with teachers in the students' own classes and other teachers in the school resulted in a mixture of positive and negative evaluations.

There was a similar picture in relation to adults in classes and others with whom the students had contact at other times.

At break times and lunchtimes the majority of the students were viewed as spending time with their peers. There was only one reference to a student being on his own. Participation in clubs was the most frequently mentioned activity. Most of the students dined in the school.

Teachers' evaluations of students' social functioning is in contrast to those of the parents and students. The latter groups provided a more positive perspective of peer, teacher and other adult relationships. However, all three groups had a similar view of the students' behaviour and activities at break times and lunchtimes.

4.10 Limitations of present research

Triangulation, involving the use of multiple sources of data, is a strategy employed in flexible research designs to increase its rigour (Robson, 2002). Of the four types of triangulation described by Denzin (as cited in Robson, 2002) this study employed 'methodological triangulation', 'data triangulation' and 'observer triangulation'. 'Methodological triangulation' involves the combination of qualitative and quantitative approaches which was a feature of this research. 'Data triangulation' comprised the use of questionnaires, group activities and semi-structured interviews. 'Observer triangulation' was addressed through seeking the views of teachers, parents, and young people in relation to the students' social functioning; and the views of parents and

young people about transition and the utility of the transition programme. Nevertheless, it is recognized that the research could have been improved and these are considered in the following paragraphs.

Measurement of the students' anxiety levels utilised a self-report questionnaire which was completed by the young people at two time points before and after the transfer to secondary school. It is recognized that there are limitations in the reliance on one source of data and that the use of multiple sources of data provides one form of triangulation (Denzin, as cited in Robson, 2002). Following completion of the research, the author discovered a parent version of the anxiety questionnaire used with the young people in this study. The Spence Children's Anxiety Scale (parent version) was developed in the late 1990's. Nauta et al. (2004) found acceptable levels of parent-child agreement in an 'anxiety-disordered' group and a control group. The employment of such a measure would have addressed this methodological limitation.

In relation to the assessment of students' social skills at time points one and two, one methodological limitation was the reliance on a sole parental report measure. There is some evidence that the parents of children with ASD tend to over-report behavioural difficulties. In a recent Scottish study, which investigated perceptions of social skills and competence in children with ASD, it was found that parents provided significantly poorer ratings than the children (Knott, Dunlop, & Mackay, 2006). In an earlier North American study by Koning and Magill-Evans (2001), adolescent boys with Asperger

Syndrome rated themselves as significantly more competent in a measure of social skills compared with teachers and parents. This was in contrast to a matched control group, whose ratings did not differ from those of parents and teachers. Thus, employment of the pupil and teacher versions of the social skills questionnaires would have provided a more comprehensive picture of the social skills of the students at the two time points.

With regard to the timing of the semi-structured interviews there were differences between the three groups of participants. Potentially, this could have resulted in differences between the groups. However, it is argued that this was less likely given that the initial settling period had passed. The young people and their parents were interviewed between late February and early April 2006 whereas school staff were interviewed over the period from mid May to late June 2006. This was partly due to the need to secure permissions and the intervening Easter break.

Content analysis was employed in relation to data from the October reunion activity and the semi structured interviews. The advantages of this approach to data analysis were that it provided a means of comparison across the groups of participants and that the data could be subject to reliability checks. One of the disadvantages of content analysis is that it involves data reduction, thus losing some of the richness of the data. A further difficulty is that of interpretation and the degree of inference employed when coding the data. During the categorization process, the author was conscious of decisions about the degree of inference when deciding the categories.

Robson (2002) has described this in terms of 'manifest content' and 'latent content'. The latter is described as a "matter of inference or interpretation on the part of the coder" in contrast to "manifest items which are physically present" (Robson, 2002, p. 354).

Finally, the absence of a control or comparison group makes it difficult attribute any outcomes to the transition programme. Thus, for example, it is not known how the students would have been functioning in secondary school if they had not participated in the transition programme.

Implications for practice

1. The study has provided insight into the experiences of a small group of students with Asperger Syndrome (AS) who participated in a transition programme. An interim report has been provided and has helped to inform further developments of the transition programme within the authority.
2. The research has enhanced our understanding of the experiences of students with AS making the transition from primary to secondary school. Although it was not intended that the findings would have general application, it is argued that the findings will be of interest to other researchers and professionals working with this population of students.
3. The existence and implications of higher anxiety levels in students with AS should be acknowledged by all professionals and adults coming into contact with these young people.

4. The use of relaxation techniques should be considered as part of an overall package of support for students with ASD.
5. The importance of peer relationships and friendships for students with AS has implications for the strategies employed by all services working with these young people.
6. The students in this study valued the opportunities they had to meet up with the other young people at this critical period of transition. Ideally, these opportunities should be made available and be further developed.
7. The parents in this study valued the formal opportunities to meet other parents. Future practice should take account of this and further develop such links.
8. There should be careful planning for the transition process, which should include strategies designed to prepare the students, such as induction days, orientation visits, familiarity with timetables, and meeting school staff.

4.12 Areas for future research

Possible areas for future research are considered below:

1. In terms of a fixed research design, the use of a comparative design (Robson, 2002) with one group taken part in an enhanced transition programme with another group participating in the regular transition programme. Outcome measures could include social skills and anxiety levels.
2. The longitudinal design employed in this study could be further extended to include three time points, namely pre- and post- transition programme

and at a follow-up point in first year at secondary schools. This would necessitate the transition programme being of longer duration.

3. In relation to assessment of students' anxiety levels, the incorporation of the parent version of the Spence Children's Anxiety Scale (SCAS-P) (Nauta et al., 2004) would provide an additional source of measurement.
4. The employment of parent, pupil and teacher versions of the Spence Social Skills Questionnaire (SSQ) (Spence, 1995) would provide a more comprehensive assessment of the students' social skills.
5. Future research could be directed towards further exploration of the nature and function of anxiety for students with ASD making the transition from primary to secondary school.
6. Exploration of the nature and function of peer relationships and friendships for students with ASD, including their role during the transition from primary to secondary school.

5 Conclusion

The focus of this research was the transition from primary to secondary school of a group of students with ASD. The aims of the research were to: follow-up the progress of a group of students who had participated in a transition programme; explore the students' and their parents' perspectives of the transition from primary to secondary school; and explore the students' and their parents' perspectives of the utility of a transition programme

Eight male students with Asperger Syndrome, all of whom had participated in a transition programme during the summer term of their final year in primary school, took part in the study during academic session 2005-2006. Other participants were the students' parents and key secondary school teachers.

The research employed a mixed method design using a range of quantitative and qualitative measures. The former comprised questionnaires completed by the students and parents before the summer break and six to seven months following the transfer. These were used to measure the students' anxiety levels and social skills. The latter comprised a discussion activity involving the students and their parents conducted at a reunion meeting in October 2005; and semi-structured interviews with students, parents and key secondary school staff conducted over a period from six to ten months following the transfer.

There was some evidence of a slight reduction in anxiety levels post transfer. However, this was within the overall context of higher levels of anxiety compared with a normative sample.

Parents reported improvements in the social skills of the students over the period from pre- to post-transfer, with moderate or strong effect sizes found in four items in the questionnaire.

Students had a number of concerns prior to the move and associated the transition with a mixture of feelings of anxiety and excitement. Overall, they provided a positive evaluation of secondary school compared with prior expectations. The transition programme was valued in relation to the activities, especially relaxation, and the opportunities to meet other students with ASD.

Parents referred to their children's prior concerns about the size of the school, relationships with teachers and peers, the level of work and the facilities. A mixture of positive and negative feelings was associated with the move. The actual experience was viewed in positive terms. Parents gave a positive evaluation of the transition programme. They commented on the opportunities they had to meet other parents and young people going through the same experience; the feeling of support from other parents and staff involved in the programme; and value of their children being with peers going through a similar experience..

Overall the students and their parents painted a positive picture of the young people's social functioning in school. In contrast, secondary school staff presented a more mixed perspective.

Some of the limitations of the present study, implications for practice and possible areas for future research have been discussed.

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Appendix 1**Letter A to parent/carer**

Appendix 1 Letter A to parent/carer

31st May 2005

Dear Parent/Carer

Re Transition Programme for Young People with ASD

As part of the evaluation of the transition programme, I am interested in gathering information at the mid-way point.

1. A questionnaire for parents/carers to explore your perspectives of your child's social skills. The questionnaire should only take 5-10 minutes to complete. I have included 2 questionnaires for completion where I have prior information that there are 2 parents/carers at home.
2. An anxiety questionnaire for young people. This should take 10-15 minutes to complete. I would ask that you allow your child to complete the questionnaire as far as possible independently. You may provide assistance for clarification purposes.

Personal information will be retained separately from the completed questionnaires, which will be coded for analysis. Issues of confidentiality and anonymity will be respected in any reporting of the results of this research.

Please return the completed questionnaires to the address above by 8th June 2005 using the enclosed SAE. Many thanks for your assistance.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 2 Anxiety questionnaire

Appendix 2 Anxiety questionnaire**Personal Information**

Your name _____

School _____

Date of completion _____

Anxiety Questionnaire for Young People

Instructions for completion of questionnaire:

Please tick the box under the word that shows how often each of these things happen to you. There are no right or wrong answers.

Statement	Never	Sometimes	Often	Always
I am scared of the dark				
I would feel afraid of being on my own at home				
I worry about being away from my parents				
I worry that something awful will happen to someone in my family				
I suddenly feel as if I can't breath when there is no reason for this				
I have to keep checking that I have done things right (like the switch is off or the door is locked)				
I feel scared if I have to sleep on my own				
I have trouble going to school in the mornings because I feel nervous or afraid				
I am scared of dogs				
I can't seem to get bad or silly thoughts out of my head				
I suddenly start to tremble or shake when there is no reason for this				
I am scared of going to the doctor or dentist				
I am scared of being in high places or lifts				
I have to think of special thoughts (like numbers or words to stop bad things from happening)				
I feel scared if I have to travel in the car, or in a bus or train)				
I am afraid of being in crowded places (like shopping centres, the movies, buses, or busy playgrounds)				

Statement	Never	Sometimes	Often	Always
All of a sudden I feel really scared for no reason at all				
I am scared of insects or spiders				
I suddenly become dizzy or faint when there is no reason for this				
My heart suddenly starts to beat too quickly for no reason				
I worry that I will suddenly get a scared feeling when there is nothing to be afraid of				
I am afraid of being in small closed places, like tunnels or small rooms				
I have to do some things over and over again like washing my hands, cleaning or putting things in a certain order				
I get bothered by bad or silly thoughts or pictures in my mind				
I have to do some things in just the right way to stop bad things happening				
I would feel scared if I had to stay away from home overnight				

Thank you for completing this questionnaire.

Appendix 3**Social skills questionnaire**

Appendix 3 Social skills questionnaire

Personal Information*

Name of child _____

School _____

Your name _____

Relationship to child _____

Date of completion _____

* Please note: Personal information will be held separately from completed questionnaires which will be coded for the purpose of analysis

Transition Programme for Young People with Autism Spectrum Disorder
Social Skills Questionnaire for Parents/Carers

Please put a circle around the rating which best describes your son over the past four weeks. Please note that the labels at either end of the rating scale have been *alternated* for each statement.

Please answer all items.

1. Reacts appropriately if other kids tease him or say unkind things.
Strongly agree 1 2 3 4 5 Strongly disagree

2. Asks to join in activities with other kids in an appropriate manner.
Strongly disagree 1 2 3 4 5 Strongly agree

3. Gives compliments or says nice things to others when appropriate.
Strongly agree 1 2 3 4 5 Strongly disagree

4. Asks permission before borrowing or using other people's things.
Strongly disagree 1 2 3 4 5 Strongly agree

5. Shares things with other kids his age.
Strongly agree 1 2 3 4 5 Strongly disagree

6. Asks other kids if he may join in their activities
Strongly disagree 1 2 3 4 5 Strongly agree

7. Expresses affection or positive feelings to others.
Strongly agree 1 2 3 4 5 Strongly disagree

8. Invites others to join in games or activities.
Strongly disagree 1 2 3 4 5 Strongly agree

9. Takes part in social or sporting activities with other kids.
Strongly agree 1 2 3 4 5 Strongly disagree

10. Takes part in conversations with adults.
Strongly disagree 1 2 3 4 5 Strongly agree

11. His tone of voice is appropriate (e.g. not aggressive or unusual)
Strongly agree 1 2 3 4 5 Strongly disagree

12. Laughs or smiles when appropriate.

Strongly disagree 1 2 3 4 5 Strongly agree

13. Takes part in conversations with other kids.

Strongly agree 1 2 3 4 5 Strongly disagree

14. Shows that he is listening to others during conversations.

Strongly disagree 1 2 3 4 5 Strongly agree

15. Stands up for himself appropriately if other kids act unreasonably.

Strongly agree 1 2 3 4 5 Strongly disagree

Many thanks for taking the time to complete this questionnaire.

Appendix 4**Letter B to parent/carer**

Appendix 4 Letter B to parent/carers

21st September 2005

Dear

Re Transition Programme for Young People with ASD

We should like to invite you to a reunion of parents and young people who were involved in the transition programme held in May/June of this year.

The focus of the evening will be to share your experiences so far and look at what has happened since the group last met. We also want to discuss whether there may be further support which we could offer during this transition period.

We really value your views on the transition process as we hope to develop this programme further. There will be opportunities for discussion during the evening.

We are meeting in xxxxx on **Monday 3rd October 2005** between 5.30pm and 7pm.

Please contact either myself (at the above number) or xxxx (xxxxxx) by Thursday 29th September 2005 to let us know whether you are coming or not.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 5 Reunion meeting : aims and outline of session

Appendix 5 Reunion meeting : aims and outline of session

Transition Programme for Young People with ASD Reunion Meeting : Monday 3rd October 2005

Aims of Meeting

- share experiences of the transition process
- share views of the transition process.
- discuss whether there may be further support which could be offered during this transition period.
- use this information to inform future developments of the programme

Outline of the Session

5.30pm	Arrival and coffee/biscuits
5.45pm	Group activity (see separate sheet)
6.45pm	Discuss future support and contact
7.00pm	Departure

Appendix 6 Reunion meeting: activity

Appendix 6 Reunion meeting: activity

Transition Programme for Young People with ASD Reunion Meeting : Monday 3rd October 2005

Group activity

The purpose of this activity is to give you the opportunity to share your experiences and views of the transition process with other parents and young people who were involved in the transition programme.

What to Do

1. Find a partner (parent : parent or young person: young person)
2. Discuss the following question:

What has helped you/ your son in the transition from primary to secondary school?

- i. Make a list of all the points on the flipchart paper provided.
- ii. Each person will be given 15 stickers.
- iii. Think about the points on the basis of the degree to which they helped the transition process.
- iv. Distribute your 15 stickers. The more stickers given to a point the more you think this helped the transition process. Some points may not get any stickers.

3. Discuss the following question:

What else could have helped you/your son in the transition from primary to secondary school?

- i. Make a list of all the points on the flipchart paper provided

4. Discuss the following question:

Looking ahead to the next 3 months, what else could help you/your son during the transition period?

- i. Make a list of all the points on the flipchart paper provided

5. Groups come together (parents and young people separately) to share thoughts/ideas. What are the similarities and differences?
6. Whole group comes together (parents and young people) to share thoughts/ideas. What are the similarities and differences?

Appendix 7 Follow-up interview schedule : parents

Appendix 7 Follow-up interview schedule: parent

Interview with Parents

Preamble

In my letter to you, I said that I wanted to follow up your son's progress now that he has been at secondary school for a few months.

The purpose of the interview is to explore your thoughts about the move to secondary school; whether you think the transition programme helped this process (and, if so, what helped and how); and how your son is getting on in secondary school.

Section 1 How your son is getting on in secondary school

In this section I want to find out how you think your son is getting on in school. I am interested in how he is getting on with his classmates, other students, teachers and other adults in the school. I am also interested in what he does at break times and lunchtimes.

I am aware that most of this information will have been obtained second hand from speaking to your son, and verbal and/or written reports from school staff. For each of the questions you may wish to indicate the basis of your comments.

(a) Peers

Question 1 How does your son get on with his classmates?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 2 How does your son get on with other students in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

(b) Teachers/Other adults**Question 3 How does he get on with teachers in his classes?***Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 4 How does he get on with other adults in his classes?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 5 How does he get on with other teachers in the school?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 6 How does he get on with other adults in the school?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

(c) Break times/lunchtimes

Question 7 What does he do at break times at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where does he go?

Who does he spend time with?

What do they do together?

How does that make him feel?

Question 8 What does he do at lunchtimes at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where does he go?

Who does he spend time with?

What do they do together?

How does that make him feel?

Section 2 The move from primary to secondary school

In this section, I want to find out what you think about the move from primary to secondary school.

Question 9 When your son was at primary school, what did he imagine secondary school would be like?

Prompts

Repeat question/rephrase

Anything else?

Probes

Whom did he talk to?

What did they tell him?

Did he get a chance to visit his secondary school?

How did that help him?

What other information did he get?

Question 10 How does secondary school compare to his expectations of it?

Prompts

Repeat question/rephrase

Anything else?

Probes

Is it different to what he expected?

In what ways is it different?

Question 11 What feelings did your son associate with the transition from primary to secondary school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Were these helpful feelings?

Section 3 The transition programme

In this section, I want to find out what you think about the transition programme. In particular, I am interested in whether you think the transition programme helped your son in the move from primary to secondary school.

Question 12 In what ways (if any) did the transition programme help your son in the transition from primary to secondary school?

Prompts

Repeat question/rephrase

Anything else?

Particular topics?

Particular activities?

Probes

Were there aspects that he found helpful?

In what ways were they helpful?

What makes you think that?

Section 4 Parent Involvement and Support

As part of the transition programme, you were provided with information about the programme at various stages. You also had opportunities to meet with other parents. I am interested in your views on both these aspects.

Question 13 What are your views about the ways in which you were kept informed about the programme?

Prompts

Repeat question/rephrase

Anything else?

Probes

What would you change?

How would this help?

Question 14 What are your views about the opportunities you had to meet with other parents?

Prompts

Repeat question/rephrase

Anything else?

Probes

What would you change?

How would this help?

Section 5 **Any other comments**

Question 15 Is there anything else you would like to add?

Appendix 8 Follow-up interview schedule: student

Appendix 8 Follow-up interview schedule: student

Interview with student

Preamble

In my letter to your mum/dad, I said that I wanted to find out how you were getting on at secondary school now that you have been there for a few months.

In this interview, I want to find out:

- how you are getting on at secondary school;
- what you think about the move from primary to secondary school;
- whether the transition programme helped you in the move from primary to secondary school

Section 1 How you are getting on in secondary school

In this section I want to find out how you think you are getting on in school. I am interested in how you are getting on with your classmates, other students, teachers and other adults in the school. I am also interested in what you do at break times and lunchtimes.

(a) Peers

Question 1 How do you get on with your classmates?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

Question 2 How do you get on with other students in the school?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

(b) Teachers/Other adults**Question 3 How do you get on with teachers in your classes?***Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

Question 4 How do you get on with other adults in your classes?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

Question 5 How do you get on with other teachers in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

Question 6 How do you get on with other adults in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help you?

How does that make you feel?

(c) **Break times/lunchtimes**

Question 7 What do you do at break times at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where do you go?

Who do you spend time with?

What do you so together?

How does that make you feel?

Question 8 What do you do at lunchtimes at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where do you go?

Who do you spend time with?

What do you do together?

How does that make you feel?

Section 2 The move from primary to secondary school

In this section, I want to find out what you think about the move from primary to secondary school.

Question 9 When you were at primary school, what did you imagine secondary school would be like?

Prompts

Repeat question/rephrase

Anything else?

Probes

Who did you talk to?

What did they tell you?

Did you get a chance to visit your school?

How did that help you?

What other information did he get?

Question 10 How does secondary school compare to your expectations of it?

Prompts

Repeat question/rephrase

Anything else?

Probes

Is it different to what you expected?

In what ways is it different?

Question 11 What feelings do you associate with the transition from primary to secondary school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Were these helpful feelings?

Section 3 The transition programme

In this section, I want to find out what you think about the transition programme. In particular, I am interested in whether you think the transition programme helped you in the move from primary to secondary school

Question 12 In what ways (if any) did the transition programme help you in the transition from primary to secondary school?

Prompts

Repeat question/rephrase

Anything else?

Particular topics?

Particular activities?

Probes

Were there aspects that you found helpful?

In what ways were they helpful?

What makes you think that?

Section 4 **Any other comments**

Question 13 Is there anything else you would like to add?

Appendix 9 Follow-up interview schedule: secondary school staff

Appendix 9 Follow-up interview schedule: secondary school staff

Interview with Secondary Staff

Preamble

In my letter to the head teacher of the school, I said that I was interested in the perspectives of key secondary school staff regarding the student's current level of social functioning in school. I asked to speak to a member of staff who knows the student well.

The purpose of this interview is to find out how you think the student is getting on in secondary school with a particular emphasis on his social functioning.

Section 1 How the student is getting on in secondary school

In this section I want to find out how you think the student is getting on in school. I am interested in how he is getting on with his classmates, other students, teachers and other adults in the school. I am also interested in what he does at break times and lunchtimes.

(a) Peers

Question 1 How does the student get on with his classmates?

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 2 How does the student get on with other students in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

(b) Teachers/Other adults**Question 3 How does he get on with teachers in his classes?***Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 4 How does he get on with other adults in his classes?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 5 How does he get on with other teachers in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

Question 6 How does he get on with other adults in the school?*Prompts*

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

How does that make him feel?

(c) Break times/lunchtimes

Question 7 What does he do at break times at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where does he go?

Whom does he spend time with?

What do they do together?

How does that make him feel?

Question 8 What does he do at lunchtimes at school?

Prompts

Repeat question/rephrase

Anything else?

Probes

Where does he go?

Who does he spend time with?

What do they do together?

How does that make him feel?

Section 2 **Any other comments**

Question 9 Is there anything else you would like to add?

Appendix 10**Letter C to parent/carer**

Appendix 10 Letter C to parent/carer

6th February 2006

Dear _____

Transition Programme for Young People with Autism Spectrum Disorder: Follow-Up

As part of the planned evaluation of the transition programme, I would like to follow up _____ progress now that he has been at secondary school for a few months.

I would like to interview you and your son about the move to secondary school and how he is getting on in school. Each interview should last approximately half an hour. If you attended the reunion meeting in October, you would have had the opportunity to share your experiences and views of the transition process as part of a group activity. However, these interviews will give you the chance to consider or further explore these issues on an individual basis.

You may recall that I asked you to complete a social skills questionnaire and your son to complete an anxiety questionnaire about half way through the transition programme. I would like to repeat this exercise as part of the evaluation process. I enclose the questionnaires which you can complete prior to my visit or during my visit.

I am also interested in the perspectives of key secondary school staff regarding your son's move to secondary school and how he is getting on in school. To this end, I intend to write to the head teacher of your son's school to request an interview with a member of staff who knows your son well. I intend to carry out the interview in April/May 2006. However, before this, I would require your consent and that of your son.

I would like to meet with you on _____ at _____ in your home to conduct the interviews and collect completed questionnaires and consent forms (enclosed). If this arrangement (date or venue) doesn't suit, please contact me at the above number.

I would like to take this opportunity to thank you for your continued interest and support.

Yours sincerely

Beth Hannah
Senior Educational Psychologist

Appendix 11 Letter to head teacher of secondary school

Appendix 11 Letter to head teacher of secondary school

6th February 2006

Dear _____

Transition Programme for Young People with Autism Spectrum Disorder: Follow-Up

A transition programme was organized last session for a small number of students in primary 7, in mainstream primary schools, who have a diagnosis of autism spectrum disorder (ASD) and were due to transfer to secondary schools in the south side of Glasgow in August 2005.

In August 2005, I sent you information about a student in your school who took part in the programme. This information focused on the three things that the student, his parent(s), and programme staff wanted secondary school staff to know about him. Examples included the student's interests, things he is good at, things that would help him learn at school and things that would help him make friends.

In early October, I arranged a reunion meeting involving the students and their parents. This provided an opportunity to share their experiences and views of the transition process. I am planning to arrange individual interviews with students and parents in February/March 2006

I am interested in the perspectives of key secondary school staff regarding the student's current level of social functioning in school. I would hope to undertake these interviews in April/May 2006. Prior to this, I will obtain informed written consent from the student and his parent(s).

Could you identify a member of staff who knows the student well and ascertain his/her willingness to participate in an interview? I enclose a consent form which can be returned in advance of the interview or completed at the time.

Thank you for your assistance in this matter.

Yours sincerely

Elizabeth Hannah
Senior Educational Psychologist

Appendix 12 Extract from parent interview with categories highlighted

Appendix 12 Extract from parent interview with categories highlighted

Question 3 How does he get on with teachers in his classes?

Unit teachers he has built up bond with. Other teachers there are no problems with.

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

Through X (*note: referred to name of child of interviewees*)

How does that help him?

Given him a lot of confidence. He seems more relaxed about being at school. Given opportunities he never had at primary. If he volunteers he is doing it. At primary he would volunteer but not let him do anything.

How does that make him feel?

Trust. Mutual respect.

Question 4 How does he get on with other adults in his classes?

Well. Seems to like them all. They laugh. Fair bit of humour.

Prompts

Repeat question/rephrase

Anything else?

Probes

What makes you think that?

How does that help him?

More relaxed. Confidence.

How does that make him feel?